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TERMINAL (ENTER 1, 2, 3, OR ?):2

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NEWS 1		Web Page URLs for STN Seminar Schedule - N. America
NEWS 2	Sep 17	IMSworld Pharmaceutical Company Directory name change to PHARMASEARCH
NEWS 3	Oct 09	Korean abstracts now included in Derwent World Patents Index
NEWS 4	Oct 09	Number of Derwent World Patents Index updates increased
NEWS 5	Oct 15	Calculated properties now in the REGISTRY/ZREGISTRY File
NEWS 6	Oct 22	Over 1 million reactions added to CASREACT
NEWS 7	Oct 22	DGENE GETSIM has been improved
NEWS 8	Oct 29	AAASD no longer available
NEWS 9	Nov 19	New Search Capabilities USPATFULL and USPAT2
NEWS 10	Nov 19	TOXCENTER(SM) - new toxicology file now available on STN
NEWS 11	Nov 29	COPPERLIT now available on STN
NEWS 12	Nov 29	DWPI revisions to NTIS and US Provisional Numbers
NEWS 13	Nov 30	Files VETU and VETB to have open access
NEWS 14	Dec 10	WPINDEX/WPIDS/WPIX New and Revised Manual Codes for 2002
NEWS 15	Dec 10	DGENE BLAST Homology Search
NEWS 16	Dec 17	WELDASEARCH now available on STN
NEWS 17	Dec 17	STANDARDS now available on STN
NEWS 18	Dec 17	New fields for DPCI
NEWS 19	Dec 19	CAS Roles modified
NEWS 20	Dec 19	1907-1946 data and page images added to CA and CAplus

NEWS EXPRESS	August 15 CURRENT WINDOWS VERSION IS V6.0c, CURRENT MACINTOSH VERSION IS V6.0 (ENG) AND V6.0J (JP), AND CURRENT DISCOVER FILE IS DATED 07 AUGUST 2001
NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS INTER	General Internet Information
NEWS LOGIN	Welcome Banner and News Items
NEWS PHONE	Direct Dial and Telecommunication Network Access to STN
NEWS WWW	CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

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FILE 'HOME' ENTERED AT 14:49:01 ON 23 JAN 2002

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=> fil reg
COST IN U.S. DOLLARS                                  SINCE FILE      TOTAL
                                                        ENTRY    SESSION
FULL ESTIMATED COST                                      0.15       0.15

FILE 'REGISTRY' ENTERED AT 14:49:11 ON 23 JAN 2002
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STRUCTURE FILE UPDATES:   20 JAN 2002  HIGHEST RN 385365-97-9
DICTIONARY FILE UPDATES:  22 JAN 2002  HIGHEST RN 385365-97-9

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.

Calculated physical property data is now available.  See HELP PROPERTIES
for more information.  See STNote 27, Searching Properties in the CAS
Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> ....Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end


=>
Uploading C:\STNEXP4\QUERIES\09688756.str

L1      STRUCTURE UPLOADED

=> que L1

L2   QUE L1

=> d l1
L1 HAS NO ANSWERS
L1                STR
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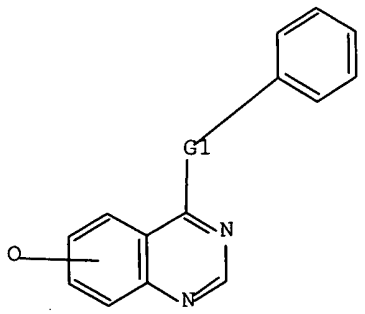


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G1 C,O,S,N
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Structure attributes must be viewed using STN Express query preparation.

=> s l1 ful
FULL SEARCH INITIATED 14:50:01 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 10751 TO ITERATE

100.0% PROCESSED 10751 ITERATIONS 4195 ANSWERS
SEARCH TIME: 00.00.03

L3 4195 SEA SSS FUL L1

=> fil caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	140.54	140.69

FILE 'CAPLUS' ENTERED AT 14:50:09 ON 23 JAN 2002

FILE COVERS 1907 - 23 Jan 2002 VOL 136 ISS 4
FILE LAST UPDATED: 21 Jan 2002 (20020121/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

This file supports REGlstRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

CAplus now provides online access to patents and literature covered in CA from 1907 to the present. Bibliographic information and abstracts were added in 2001 for over 3.8 million records from 1907-1966.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

The CA Lexicon is now available in the Controlled Term (/CT) field. Enter HELP LEXICON for full details.

```
=> s l
L4     1191046 L

=> s l3
L5         269 L3


=> e inflammation/ct
E#   FREQUENCY     AT      TERM
--   ---------     --      ----
E1           0      1      INFLAMMABLE/CT
E2           0      2      INFLAMMABLE SUBSTANCES/CT
E3       19483      5 --> INFLAMMATION/CT
E4           0      3      INFLAMMATION (L) ACUTE/CT
E5           0      3      INFLAMMATION (L) ALLERGIC/CT
E6           0      4      INFLAMMATION (L) CELLULITIS/CT
E7           0      3      INFLAMMATION (L) CHRONIC/CT
E8           0      3      INFLAMMATION (L) EMPYEMA/CT
E9           0      4      INFLAMMATION (L) GRANULOMATOUS/CT
E10          0      3      INFLAMMATION (L) INFLAMMATORY EDEMA/CT
E11          0      4      INFLAMMATION (L) LAMINITIS/CT
E12          0      3      INFLAMMATION (L) NEUROGENIC/CT

=> e e3+all
E1       19483   -->  Inflammation/CT
                      HN   Valid heading during volume 66 (1967) to present.
                      NOTE For inflammation of specific anatomical parts, see
the
                           specific anatomical part heading.
E2          19        NT1  Empyema/CT
E3          45        NT1  Laminitis/CT
E4                    RTCS Cyclooxygenase 1/CT
E5                    RTCS Cyclooxygenase 2/CT
******END***

=> s inflammat?
L6      132520 INFLAMMAT?

=> s empyema or laminitis or cyclooxygenase
           185 EMPYEMA
           119 LAMINITIS
         14941 CYCLOOXYGENASE
L7       15243 EMPYEMA OR LAMINITIS OR CYCLOOXYGENASE

=> s l6 or l7
L8      143431 L6 OR L7

=> e prostaglandin/ct
E#   FREQUENCY     AT      TERM
--   ---------     --      ----
E1           0      2      PROSTACYCLINS/CT
E2           0      2      PROSTACYCLINS PROSTAGLANDINS/CT
E3           0      1 --> PROSTAGLANDIN/CT
E4           0      6      PROSTAGLANDIN A1/CT
E5           0      6      PROSTAGLANDIN A2/CT
E6           0      2      PROSTAGLANDIN ANTAGONISTS/CT
```

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E7            1      2      PROSTAGLANDIN B/CT
E8            0      2      PROSTAGLANDIN CYCLOOXYGENASE-INHIBITING MOL.
STRUCTURE
                            -BIOL. ACTIVITY RELATIONSHIP/CT
E9            0      2      PROSTAGLANDIN D RECEPTORS/CT
E10           0     15      PROSTAGLANDIN D2/CT
E11           0      2      PROSTAGLANDIN DP RECEPTORS/CT
E12          40      2      PROSTAGLANDIN E/CT

=> e e12+all
E1           40   -->  Prostaglandin E/CT
E2                     USE  Prostaglandins (L) E/CT
******END***

=> s prostaglandin E or prostaglandins (L) E
         59269 PROSTAGLANDIN
       1581561 E
          2525 PROSTAGLANDIN E
                 (PROSTAGLANDIN(W)E)
         38732 PROSTAGLANDINS
       1581561 E
          4226 PROSTAGLANDINS (L) E
L9        5238 PROSTAGLANDIN E OR PROSTAGLANDINS (L) E

=> e ultraviolet light/ct
E#   FREQUENCY    AT     TERM
--   ---------    --     ----
E1            0      2      ULTRAVIOLET LAMPS/CT
E2            0      2      ULTRAVIOLET LASERS/CT
E3         3273      2 --> ULTRAVIOLET LIGHT/CT
E4            0      2      ULTRAVIOLET LIGHT STABILIZERS/CT
E5            1             ULTRAVIOLET LIGHT, BIOLOGICAL EFFECT/CT
E6         1557             ULTRAVIOLET LIGHT, BIOLOGICAL EFFECTS/CT
E7         1184             ULTRAVIOLET LIGHT, CHEMICAL AND PHYSICAL EFFECTS/CT
E8            2             ULTRAVIOLET LIGHT, CHEMICAL EFFECTS/CT
E9            0      2      ULTRAVIOLET MIRRORS/CT
E10           0      2      ULTRAVIOLET PHOTOELECTRON SPECTROSCOPY/CT
E11           0      2      ULTRAVIOLET PHOTOEMISSION/CT
E12           1             ULTRAVIOLET RAADIATION/CT


=> e e12+all
E1                 -->  Ultraviolet radiation (L) solar/CT
E2          419      NEW  Solar UV radiation/CT
******END***


=> e ultraviolet radiation/ct
E#   FREQUENCY    AT     TERM
--   ---------    --     ----
E1            1             ULTRAVIOLET RAADIATION/CT
E2            1             ULTRAVIOLET RAADIATION, BIOLOGICAL EFFECTS/CT
E3        17915      2 --> ULTRAVIOLET RADIATION/CT
E4            0      2      ULTRAVIOLET RADIATION (L) A/CT
E5            0      3      ULTRAVIOLET RADIATION (L) AB/CT
E6            0      2      ULTRAVIOLET RADIATION (L) B/CT
E7            0      2      ULTRAVIOLET RADIATION (L) C/CT
```

```
E8            0      2      ULTRAVIOLET RADIATION (L) FAR-/CT
E9            0      2      ULTRAVIOLET RADIATION (L) NEAR-/CT
E10           0      2      ULTRAVIOLET RADIATION (L) SOLAR/CT
E11           0      3      ULTRAVIOLET RADIATION (L) SOLAR, B/CT
E12           0      2      ULTRAVIOLET RADIATION (L) VACUUM-/CT

=> e e3+all
E1        17915    --> Ultraviolet radiation/CT
                     HN   Valid heading during volumes 86-125 (1977-1996) only.
E2         7585      NEW  UV radiation/CT
******END***

=> e ultraviolet radiation B/ct
E#    FREQUENCY     AT      TERM
--    ---------     --      ----
E1            0      3      ULTRAVIOLET RADIATION (L) SOLAR, B/CT
E2            0      2      ULTRAVIOLET RADIATION (L) VACUUM-/CT
E3            0        --> ULTRAVIOLET RADIATION B/CT
E4            0      2      ULTRAVIOLET RADIATION DETECTORS/CT
E5         7856             ULTRAVIOLET RADIATION, BIOLOGICAL EFFECTS/CT
E6         3025             ULTRAVIOLET RADIATION, CHEMICAL AND PHYSICAL
EFFECTS/C
                            T
E7          435      2      ULTRAVIOLET SOURCES/CT
E8            0      2      ULTRAVIOLET SOURCES (L) VACUUM-/CT
E9            2      2      ULTRAVIOLET SPECTRA/CT
E10           0      2      ULTRAVIOLET SPECTROSCOPY/CT
E11           0      1      ULTRAWEAK/CT
E12           0      2      ULTRAWEAK BIOLUMINESCENCE/CT

=> e UV radiation B/ct
E#    FREQUENCY     AT      TERM
--    ---------     --      ----
E1            0     13      UV RADIATION (L) NEAR-UV/CT
E2            0     10      UV RADIATION (L) SYNCHROTRON/CT
E3            0        --> UV RADIATION B/CT
E4            0      2      UV RADIATION DETECTORS/CT
E5            0      2      UV RADIATION SOURCES/CT
E6            0      2      UV RADIOMETERS/CT
E7            0      3      UV REFLECTANCE SPECTROSCOPY/CT
E8            0      2      UV REFLECTION/CT
E9            0      3      UV REFLECTION SPECTRA/CT
E10           0      3      UV REFLECTION SPECTROMETRY/CT
E11           0      2      UV RESONANCE RAMAN SPECTRA/CT
E12           0      2      UV RESONANCE RAMAN SPECTROSCOPY/CT

=> s ultraviolet radiation or uv radiation
        170314 ULTRAVIOLET
        559660 RADIATION
         22224 ULTRAVIOLET RADIATION
                 (ULTRAVIOLET(W)RADIATION)
        358364 UV
        559660 RADIATION
         29576 UV RADIATION
                 (UV(W)RADIATION)
L10      43935 ULTRAVIOLET RADIATION OR UV RADIATION
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=> d his

     (FILE 'HOME' ENTERED AT 14:49:01 ON 23 JAN 2002)

     FILE 'REGISTRY' ENTERED AT 14:49:11 ON 23 JAN 2002
L1              STRUCTURE UPLOADED
L2              QUE L1
L3         4195 S L1 FUL

     FILE 'CAPLUS' ENTERED AT 14:50:09 ON 23 JAN 2002
L4      1191046 S L
L5          269 S L3
                E UVB RADIATION
                E UVB RADIATION/CT
                E UVB
                E E3+ALL
                E UVB/CT
                E ULTRAVIOLET B RADIATION/CT
                E UVB LIGHT/CT
                E INFLAMMATION
                E E3+ALL
                E INFLAMMATION/CT
                E E3+ALL
L6        132520 S INFLAMMAT?
L7         15243 S EMPYEMA OR LAMINITIS OR CYCLOOXYGENASE
L8        143431 S L6 OR L7
                E PROSTALGLANDIN E2
                E PROSTALGLANDIN E2/CT
                E PROSTALGLANDIN/CT
                E PROSTAGLANDIN/CT
                E E12+ALL
L9          5238 S PROSTAGLANDIN E OR PROSTAGLANDINS (L) E
                E ULTRAVIOLET LIGHT
                E ULTRAVIOLET LIGHT/CT
                E E12+AA
                E E12+ALL
                E ULTRAVIOLET RADIATION/CT
                E E3+ALL
                E ULTRAVIOLET RADIATION B/CT
                E UV RADIATION B/CT
L10        43935 S ULTRAVIOLET RADIATION OR UV RADIATION

=> l5 and l8
L5 IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> s l5 and l8
L11           11 L5 AND L8

=> s l5 and l10
L12            2 L5 AND L10

=> s l5 and l8
L13           11 L5 AND L8
```

```
=> s l5 and l9
L14           0 L5 AND L9

=> s l11 and l12
L15           0 L11 AND L12

=> s l11 or l12
L16          13 L11 OR L12

=> d ibib abs hitstr 1-
YOU HAVE REQUESTED DATA FROM 13 ANSWERS - CONTINUE? Y/(N):y

L16  ANSWER 1 OF 13  CAPLUS  COPYRIGHT 2002 ACS
ACCESSION NUMBER:         2002:10244  CAPLUS
TITLE:                    Use of EGF-R protein tyrosine kinase inhibitors for
                          preventing photoaging in human skin
INVENTOR(S):              Voorhees, John J.; Fisher, Gary J.
PATENT ASSIGNEE(S):       Regents of the University of Michigan, USA
SOURCE:                   PCT Int. Appl., 29 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.         KIND  DATE          APPLICATION NO.  DATE
     ---------------    ----  --------      ---------------  --------
     WO 2002000183      A2    20020103      WO 2001-US41154  20010626
         W:  AE, AG, AL, AU, BA, BB, BG, BR, BZ, CA, CN, CR, CU, CZ, DM, DZ,
             EE, GD, GE, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT,
             LV, MA, MD, MG, MK, MN, MX, NO, NZ, PL, PT, RO, SG, SI, SK, TR,
             TT, UA, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.:                    US 2000-213940   P  20000626
AB   Photoaging of human skin, such as evidenced by the increased presence of
     matrix metalloproteinases after exposure to UV radiation
     , is prevented by pre-treating the skin with an inhibitor of epidermal
     growth factor receptor (EGF-R) prior to exposure.  Such inhibitors are
     preferably natural, an example of which is genistein.  Compns. used for
     such purposes preferably include an EGF-R inhibitor as well as another
MMP
     inhibitor, such as a retinoid.
IT   153436-54-5, PD 153035
     RL: COS (Cosmetic use); PAC (Pharmacological activity); THU (Therapeutic
     use); BIOL (Biological study); USES (Uses)
        (use of epidermal growth factor receptor protein tyrosine kinase
        inhibitors for preventing photoaging in human skin by preventing
        induction of matrix metalloproteinases and combination with other
        agents such as retinoids)
RN   153436-54-5  CAPLUS
CN   4-Quinazolinamine, N-(3-bromophenyl)-6,7-dimethoxy- (9CI)  (CA INDEX
NAME)
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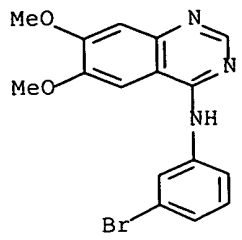


L16 ANSWER 2 OF 13 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:545523 CAPLUS
DOCUMENT NUMBER: 135:132432
TITLE: JAK/STAT pathway inhibitors and the uses thereof
INVENTOR(S): Vasios, George
PATENT ASSIGNEE(S): Genzyme Corporation, USA
SOURCE: PCT Int. Appl., 55 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001052892	A2	20010726	WO 2001-US2033	20010122

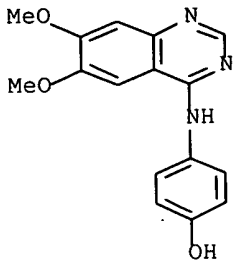
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2000-177872 P 20000124
US 2000-723490 A 20001128

AB The role of JAK/STAT (Janus Kinase/Signal Transducers and Activators of Transcription) signal transduction pathway cellular mechanisms that lead to the onset and progression of degenerative joint diseases or disorders such as osteoarthritis (OA) is disclosed. Certain known effective OA therapeutics such as hymenialdisine, debromohymenialdisine, and its variants and derivs. are shown to function as JAK3-specific inhibitors, which downregulate steady state mRNA levels of key cellular components involved in cartilage degrdn. Another JAK3-specific inhibitor, not previously known as an OA therapeutic, is shown to downregulate steady state mRNA levels of various cellular components involved in cartilage degrdn. in a manner identical to that of the known OA therapeutics.

IT **202475-60-3**, WHI-P131
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(aJAK/STAT pathway inhibitors for treatment of osteoarthritis)

RN 202475-60-3 CAPLUS
CN Phenol, 4-[(6,7-dimethoxy-4-quinazolinyl)amino]- (9CI) (CA INDEX NAME)



L16 ANSWER 3 OF 13 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:380344 CAPLUS
DOCUMENT NUMBER: 134:361373
TITLE: Protein kinase inhibitors and other agents for the treatment of Helicobacter pylori-induced gastrointestinal diseases
INVENTOR(S): Wallasch, Christian; Bevec, Dorian
PATENT ASSIGNEE(S): Axxima Pharmaceuticals A.-G., Germany
SOURCE: PCT Int. Appl., 31 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001035899	A2	20010525	WO 2000-EP11444	20001117
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 2001030037	A5	20010530	AU 2001-30037	20001117

PRIORITY APPLN. INFO.:
EP 1999-123042 A 19991119
US 1999-448013 A 19991123
WO 2000-EP11444 W 20001117

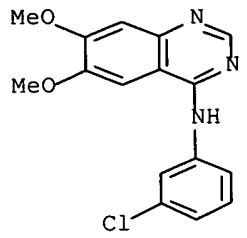
AB A method is disclosed for the manuf. of a medicament for treating or preventing Helicobacter mediated diseases in a mammal and a method for treating or preventing Helicobacter-mediated diseases. The compds. of the invention include CCK-B inhibitors, protein kinase C inhibitors, membrane-assocd. metalloproteinase inhibitors, growth factor receptor activation inhibitors, growth factor receptor kinase inhibitors, mitogen-activated protein kinase cascade inhibitors, and transcription inhibitors.

IT **153436-53-4**, Tyrphostin AG 1478
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(Tyrphostin AG 1478; protein kinase inhibitors and other agents for treatment of Helicobacter pylori-induced gastrointestinal disease)

RN 153436-53-4 CAPLUS

CN 4-Quinazolinamine, N-(3-chlorophenyl)-6,7-dimethoxy- (9CI) (CA INDEX NAME)



L16 ANSWER 4 OF 13 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:666715 CAPLUS

DOCUMENT NUMBER: 133:252449

TITLE: Quinazolines and other bicyclic heterocycles, pharmaceutical compositions containing these compounds as tyrosine kinase inhibitors, and processes for preparing them

INVENTOR(S): Himmelsbach, Frank; Langkopf, Elke; Blech, Stefan; Jung, Birgit; Metz, Thomas; Solca, Flavio

PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma K.-G., Germany

SOURCE: PCT Int. Appl., 153 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

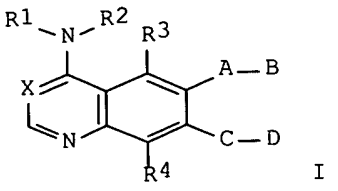
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000055141	A1	20000921	WO 2000-EP2228	20000314
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
DE 19911509	A1	20000921	DE 1999-19911509	19990315
EP 1163227	A1	20011219	EP 2000-909360	20000314
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
NO 2001004487	A	20010914	NO 2001-4487	20010914

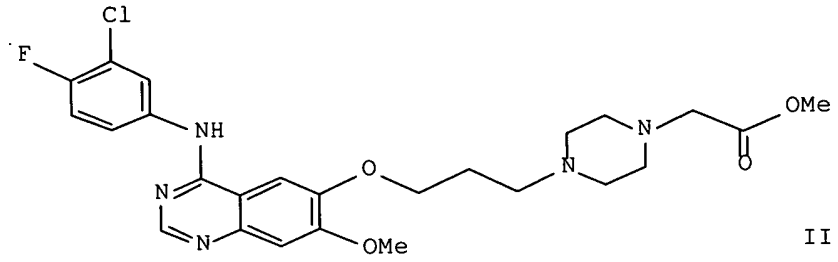
PRIORITY APPLN. INFO.: DE 1999-19911509 A 19990315
WO 2000-EP2228 W 20000314

OTHER SOURCE(S): MARPAT 133:252449

GI



I



II

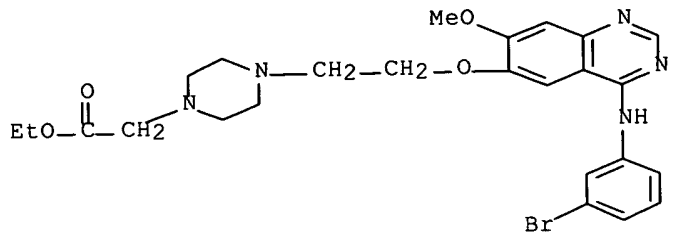
AB The invention relates to bicyclic heterocyclic compds. I [R1 = H, alkyl; R2 = (un)substituted Ph, CH2Ph, or CH(Me)Ph; R3, R4 = H, F, Cl, OMe, or Me optionally substituted by OMe, NMe2, NEt2, pyrrolidino, piperidino, or morpholino; X = N or C(CN); A = O, NH, (un)substituted alkylene, O-alkylene, NH-alkylene, O-cycloalkylene, etc.; B = (un)substituted amine-contg. sidechain, piperazino, alkyleneimino, morpholino, etc.; or AB = H, F, Cl, alkoxy, amino, etc.; C = groups similar to A; D = groups similar to B; with a variety of provisos] and their tautomers, stereoisomers, and salts, and particularly their physiol. acceptable salts with inorg. or org. acids or bases. The compds. have valuable pharmacol. properties, particularly an inhibitory effect on signal transduction mediated by tyrosine kinases, and are useful in treating diseases, particularly tumor diseases, and diseases of the lung and airways. Over 20 compds. were prepd., and over 200 are listed. For instance, alkylation of 4-(3-chloro-4-fluorophenylamino)-6-[3-(1-piperazinyl)propyloxy]-7-methoxyquinazoline (prepn. given) by Me bromoacetate gave 51% title compd.

II. The latter compd. inhibited EGF-dependent proliferation of F/L-HERc cells in vitro, with an IC50 of 46 nM.

IT **295330-22-2P**, 4-[(3-Bromophenyl)amino]-6-[2-[4-[(ethoxycarbonyl)methyl]piperazin-1-yl]ethoxy]-7-methoxyquinazoline
RL: BAC (Biological activity or effector, except adverse); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; prepn. of quinazoline derivs. and other bicyclic heterocycles as tyrosine kinase inhibitors)

RN 295330-22-2 CAPLUS

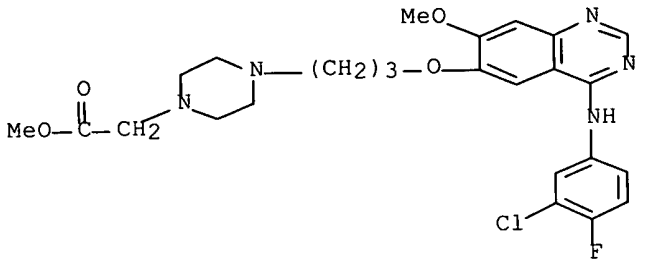
CN 1-Piperazineacetic acid, 4-[2-[[4-[(3-bromophenyl)amino]-7-methoxy-6-quinazolinyl]oxy]ethyl]-, ethyl ester (9CI) (CA INDEX NAME)



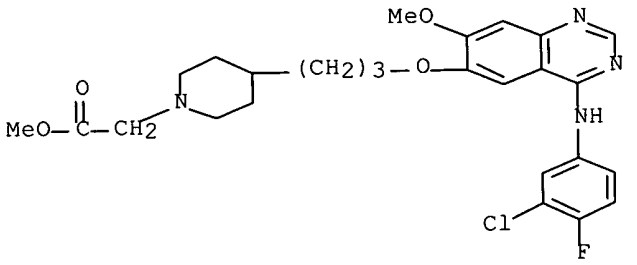
IT **295330-12-0P**, 4-(3-Chloro-4-fluorophenylamino)-6-[3-[4-(methoxycarbonylmethyl)-1-piperazinyl]propyloxy]-7-methoxyquinazoline **295330-13-1P**, 4-(3-Chloro-4-fluorophenylamino)-6-[3-[1-(methoxycarbonylmethyl)-4-piperidinyl]propyloxy]-7-methoxyquinazoline **295330-14-2P**, (S)-4-[(3-Bromophenyl)amino]-6-[[1-[(ethoxycarbonyl)methyl]pyrrolidin-2-yl]methoxy]-7-methoxyquinazoline **295330-15-3P**, (R)-4-[(3-Bromophenyl)amino]-6-[[1-[(ethoxycarbonyl)methyl]pyrrolidin-2-yl]methoxy]-7-methoxyquinazoline **295330-16-4P**, (S)-4-[(3-Chloro-4-fluorophenyl)amino]-6-[[1-[(methoxycarbonyl)methyl]pyrrolidin-2-yl]methoxy]-7-cyclopentyloxyquinazoline **295330-17-5P**, (S)-4-[(3-Chloro-4-fluorophenyl)amino]-6-[[1-[(methoxycarbonyl]methyl]pyrrolidin-2-yl]methoxy]-7-cyclopentylmethoxyquinazoline **295330-18-6P**, 4-(3-Chloro-4-fluorophenylamino)-6-[3-[N-(ethoxycarbonylmethyl)-N-methylamino]propyloxy]-7-methoxyquinazoline **295330-19-7P**, (S)-4-[(3-Bromophenyl)amino]-6-[3-(2-methoxycarbonylpyrrolidin-1-yl)propyloxy]-7-methoxyquinazoline **295330-20-0P**, (R)-4-[(3-Bromophenyl)amino]-6-[3-(2-methoxycarbonylpyrrolidin-1-yl)propyloxy]-7-methoxyquinazoline **295330-23-3P**, 4-[(3-Bromophenyl)amino]-6-[2-[N-[(ethoxycarbonyl)methyl]-N-methylamino]ethoxy]-7-methoxyquinazoline **295330-24-4P**, 4-[(3-Bromophenyl)amino]-6-[2-[N,N-bis[(ethoxycarbonyl)methyl]amino]ethoxy]-7-methoxyquinazoline **295330-25-5P**, 4-[(3-Bromophenyl)amino]-6-[2-[4-[1,2-bis(methoxycarbonyl)ethyl]piperazin-1-yl]ethoxy]-7-methoxyquinazoline **295330-26-6P**, 4-[(3-Bromophenyl)amino]-6-[2-[4-[1-[(methoxycarbonyl)methyl]-2-(methoxycarbonyl)ethyl]piperazin-1-yl]ethoxy]-7-methoxyquinazoline **295330-27-7P**, (R)-4-[(3-Chloro-4-fluorophenyl)amino]-6-[2-[2-(methoxycarbonyl)pyrrolidin-1-yl]ethoxy]-7-cyclopentyloxyquinazoline **295330-28-8P**, 4-[(3-Chloro-4-fluorophenyl)amino]-6-[2-[4-[(ethoxycarbonyl)methyl]piperazin-1-yl]ethoxy]-7-cyclopentyloxyquinazoline **295330-29-9P**, 4-[(3-Chloro-4-fluorophenyl)amino]-6-cyclopentyloxy-7-[2-[N-(2-hydroxy-2-methylprop-1-yl)-N-[(ethoxycarbonyl)methyl]amino]ethoxy]quinazoline **295330-30-2P**, 4-[(3-Chloro-4-fluorophenyl)amino]-6-cyclopentyloxy-7-[2-(6,6-dimethyl-2-oxomorpholin-4-yl)ethoxy]quinazoline **295330-31-3P**, 4-[(3-Chloro-4-fluorophenyl)amino]-6-cyclopentyloxy-7-[2-[N-(2-oxotetrahydrofuran-3-yl)-N-methylamino]ethoxy]quinazoline **295330-32-4P**, 4-[(3-Bromophenyl)amino]-6-[2-(6,6-dimethyl-2-

oxomorpholin-4-yl)ethoxy]-7-methoxyquinazoline **295330-34-6P**,
4-[(3-Bromophenyl)amino]-6-[2-[N-(2-oxotetrahydrofuran-4-yl)-N-methylamino]ethoxy]-7-methoxyquinazoline **295330-36-8P**,
4-[(3-Bromophenyl)amino]-6-[3-[4-[(ethoxycarbonyl)methyl]piperazin-1-yl]-2-hydroxypropyloxy]-7-methoxyquinazoline **295330-37-9P**,
4-[(3-Bromophenyl)amino]-6-[2-[4-(carboxymethyl)piperazin-1-yl]ethoxy]-7-methoxyquinazoline
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; prepn. of quinazoline derivs. and other bicyclic heterocycles as tyrosine kinase inhibitors)

RN 295330-12-0 CAPLUS
CN 1-Piperazineacetic acid, 4-[3-[[4-[(3-chloro-4-fluorophenyl)amino]-7-methoxy-6-quinazolinyl]oxy]propyl]-, methyl ester (9CI) (CA INDEX NAME)

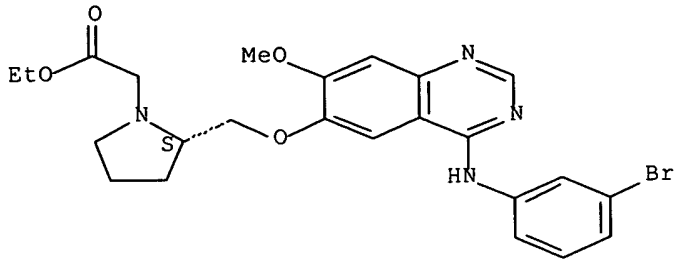


RN 295330-13-1 CAPLUS
CN 1-Piperidineacetic acid, 4-[3-[[4-[(3-chloro-4-fluorophenyl)amino]-7-methoxy-6-quinazolinyl]oxy]propyl]-, methyl ester (9CI) (CA INDEX NAME)



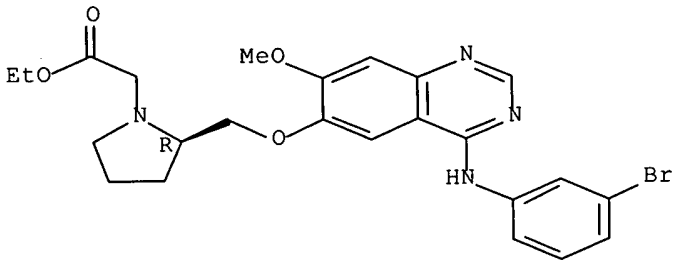
RN 295330-14-2 CAPLUS
CN 1-Pyrrolidineacetic acid, 2-[[[4-[(3-bromophenyl)amino]-7-methoxy-6-quinazolinyl]oxy]methyl]-, ethyl ester, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



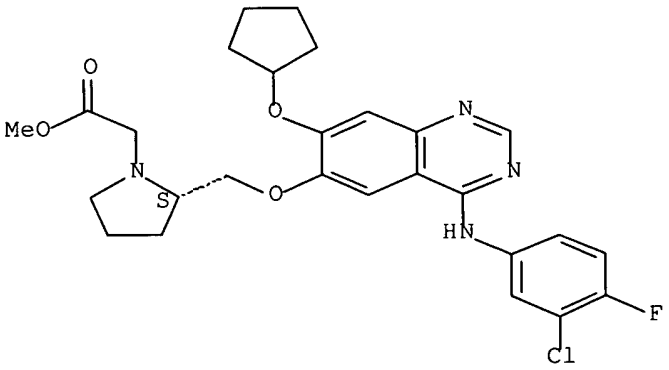
RN 295330-15-3 CAPLUS
CN 1-Pyrrolidineacetic acid, 2-[[[4-[(3-bromophenyl)amino]-7-methoxy-6-quinazolinyl]oxy]methyl]-, ethyl ester, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



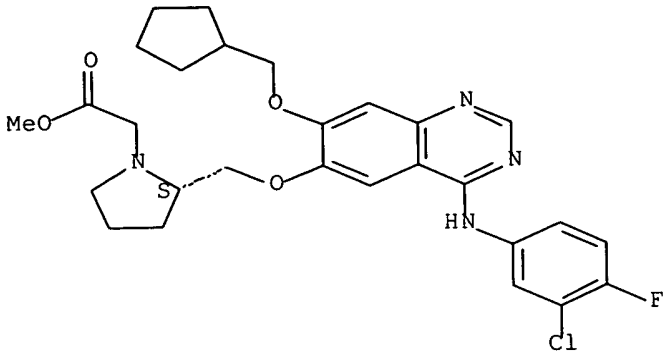
RN 295330-16-4 CAPLUS
CN 1-Pyrrolidineacetic acid, 2-[[[4-[(3-chloro-4-fluorophenyl)amino]-7-(cyclopentyloxy)-6-quinazolinyl]oxy]methyl]-, methyl ester, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

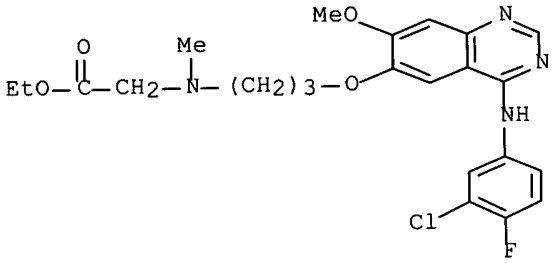


RN 295330-17-5 CAPLUS
CN 1-Pyrrolidineacetic acid, 2-[[[4-[(3-chloro-4-fluorophenyl)amino]-7-(cyclopentylmethoxy)-6-quinazolinyl]oxy]methyl]-, methyl ester, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

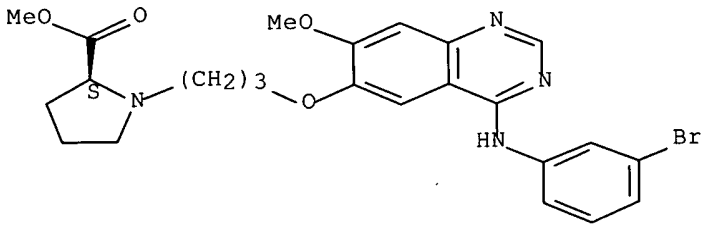


RN 295330-18-6 CAPLUS
CN Glycine, N-[3-[[4-[(3-chloro-4-fluorophenyl)amino]-7-methoxy-6-quinazolinyl]oxy]propyl]-N-methyl-, ethyl ester (9CI) (CA INDEX NAME)



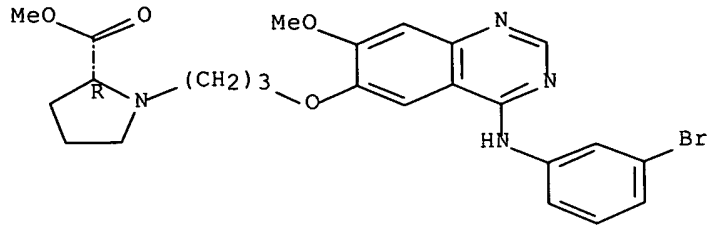
RN 295330-19-7 CAPLUS
CN L-Proline, 1-[3-[[4-[(3-bromophenyl)amino]-7-methoxy-6-quinazolinyl]oxy]propyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

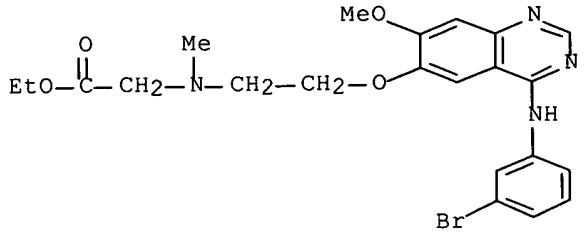


RN 295330-20-0 CAPLUS
CN D-Proline, 1-[3-[[4-[(3-bromophenyl)amino]-7-methoxy-6-quinazolinyl]oxy]propyl]-, methyl ester (9CI) (CA INDEX NAME)

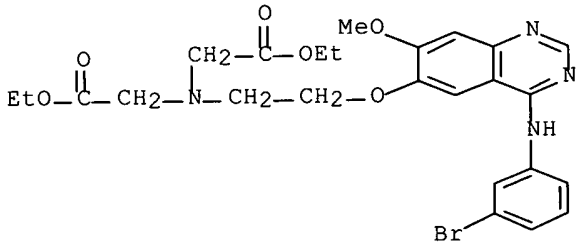
Absolute stereochemistry.



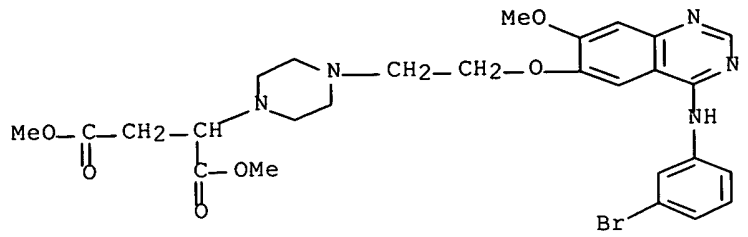
RN 295330-23-3 CAPLUS
CN Glycine, N-[2-[[4-[(3-bromophenyl)amino]-7-methoxy-6-quinazolinyl]oxy]ethyl]-N-methyl-, ethyl ester (9CI) (CA INDEX NAME)



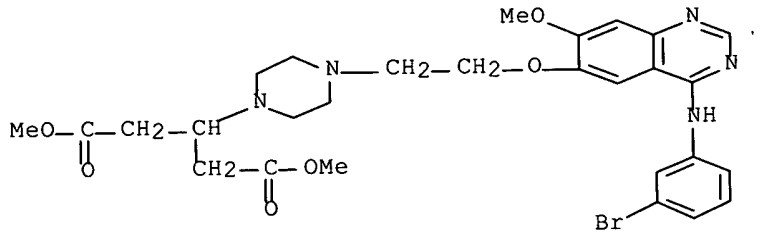
RN 295330-24-4 CAPLUS
CN Glycine, N-[2-[[4-[(3-bromophenyl)amino]-7-methoxy-6-quinazolinyl]oxy]ethyl]-N-(2-ethoxy-2-oxoethyl)-, ethyl ester (9CI) (CA INDEX NAME)



RN 295330-25-5 CAPLUS
CN Butanedioic acid, [4-[2-[[4-[(3-bromophenyl)amino]-7-methoxy-6-quinazolinyl]oxy]ethyl]-1-piperazinyl]-, dimethyl ester (9CI) (CA INDEX NAME)

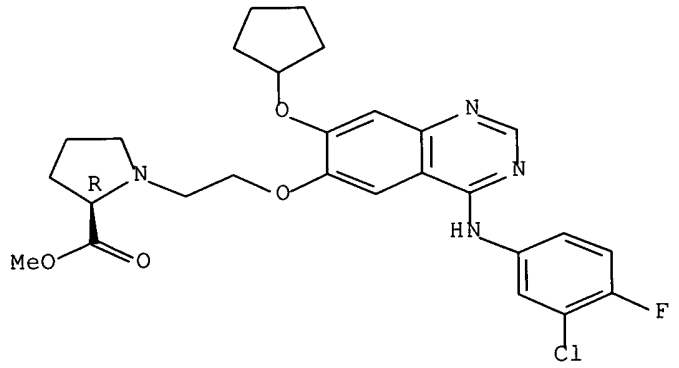


RN 295330-26-6 CAPLUS
CN Pentanedioic acid, 3-[4-[2-[[4-[(3-bromophenyl)amino]-7-methoxy-6-quinazolinyl]oxy]ethyl]-1-piperazinyl]-, dimethyl ester (9CI) (CA INDEX NAME)

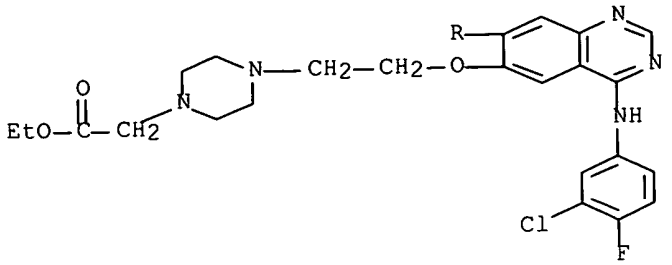


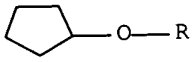
RN 295330-27-7 CAPLUS
CN D-Proline, 1-[2-[[4-[(3-chloro-4-fluorophenyl)amino]-7-(cyclopentyloxy)-6-quinazolinyl]oxy]ethyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

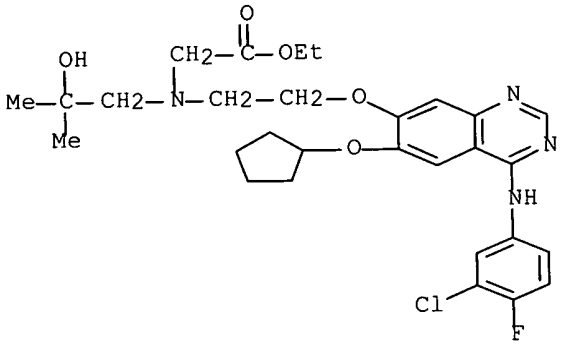


RN 295330-28-8 CAPLUS
CN 1-Piperazineacetic acid, 4-[2-[[4-[(3-chloro-4-fluorophenyl)amino]-7-(cyclopentyloxy)-6-quinazolinyl]oxy]ethyl]-, ethyl ester (9CI) (CA INDEX NAME)

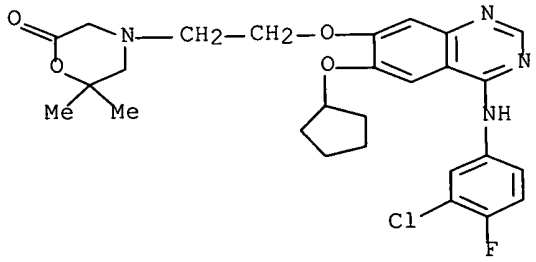




RN 295330-29-9 CAPLUS
CN Glycine, N-[2-[[4-[(3-chloro-4-fluorophenyl)amino]-6-(cyclopentyloxy)-7-quinazolinyl]oxy]ethyl]-N-(2-hydroxy-2-methylpropyl)-, ethyl ester (9CI) (CA INDEX NAME)

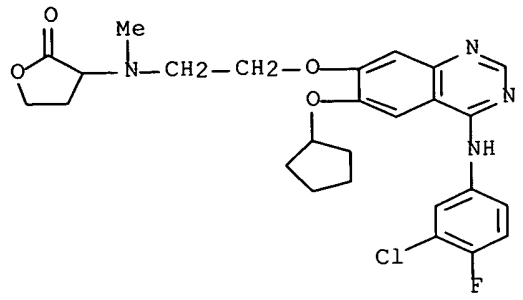


RN 295330-30-2 CAPLUS
CN 2-Morpholinone, 4-[2-[[4-[(3-chloro-4-fluorophenyl)amino]-6-(cyclopentyloxy)-7-quinazolinyl]oxy]ethyl]-6,6-dimethyl- (9CI) (CA INDEX NAME)

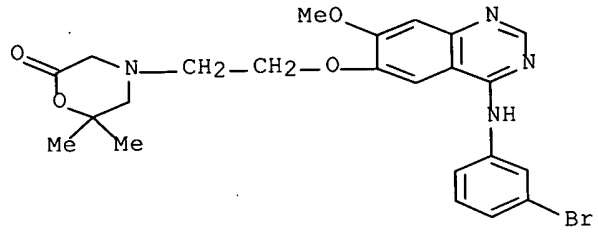


RN 295330-31-3 CAPLUS
CN 2(3H)-Furanone, 3-[[2-[[4-[(3-chloro-4-fluorophenyl)amino]-6-(cyclopentyloxy)-7-quinazolinyl]oxy]ethyl]methylamino]dihydro- (9CI)

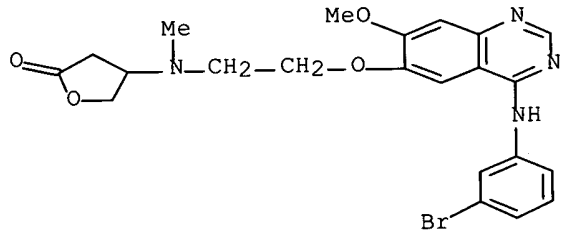
(CA
INDEX NAME)



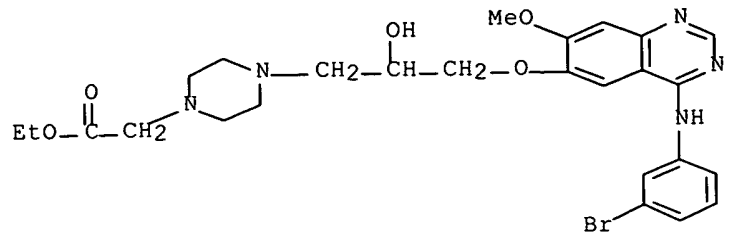
RN 295330-32-4 CAPLUS
CN 2-Morpholinone, 4-[2-[[4-[(3-bromophenyl)amino]-7-methoxy-6-quinazolinyl]oxy]ethyl]-6,6-dimethyl- (9CI) (CA INDEX NAME)



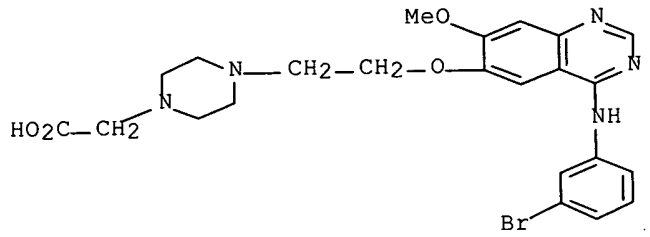
RN 295330-34-6 CAPLUS
CN 2(3H)-Furanone, 4-[[2-[[4-[(3-bromophenyl)amino]-7-methoxy-6-quinazolinyl]oxy]ethyl]methylamino]dihydro- (9CI) (CA INDEX NAME)



RN 295330-36-8 CAPLUS
CN 1-Piperazineacetic acid, 4-[3-[[4-[(3-bromophenyl)amino]-7-methoxy-6-quinazolinyl]oxy]-2-hydroxypropyl]-, ethyl ester (9CI) (CA INDEX NAME)



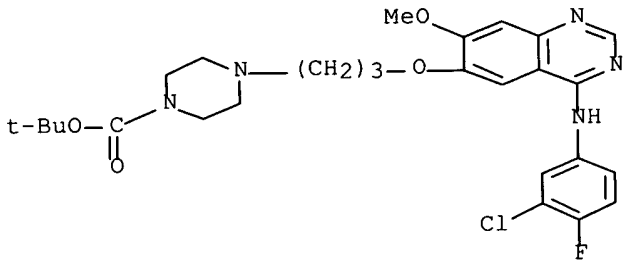
RN 295330-37-9 CAPLUS
CN 1-Piperazineacetic acid, 4-[2-[[4-[(3-bromophenyl)amino]-7-methoxy-6-quinazolinyl]oxy]ethyl]- (9CI) (CA INDEX NAME)



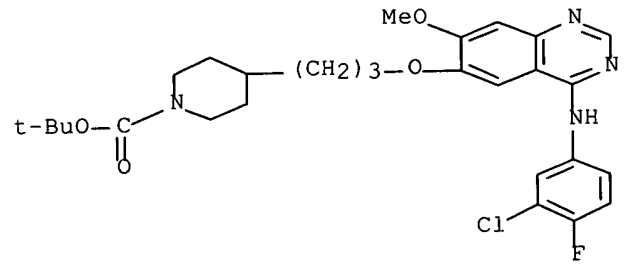
IT **295330-38-0P**, 4-(3-Chloro-4-fluorophenylamino)-6-[3-(4-tert-butyloxycarbonylpiperazino)propyloxy]-7-methoxyquinazoline **295330-39-1P**, 4-(3-Chloro-4-fluorophenylamino)-6-[3-(1-tert-butyloxycarbonyl-4-piperidinyl)propyloxy]-7-methoxyquinazoline **295330-40-4P**, (S)-4-[(3-Bromophenyl)amino]-6-[[1-(tert-butyloxycarbonyl)pyrrolidin-2-yl]methoxy]-7-methoxyquinazoline **295330-41-5P**, (R)-4-[(3-Bromophenyl)amino]-6-[[1-(tert-butyloxycarbonyl)pyrrolidin-2-yl]methoxy]-7-methoxyquinazoline **295330-42-6P**, (S)-4-[(3-Chloro-4-fluorophenyl)amino]-6-[[1-(tert-butyloxycarbonyl)pyrrolidin-2-yl]methoxy]-7-cyclopentyloxyquinazoline **295330-43-7P**, (S)-4-[(3-Chloro-4-fluorophenyl)amino]-6-[[1-(tert-butyloxycarbonyl)pyrrolidin-2-yl]methoxy]-7-cyclopentylmethoxyquinazoline **295330-45-9P**, 4-(3-Chloro-4-fluorophenylamino)-6-[3-(1-piperazinyl)propyloxy]-7-methoxyquinazoline **295330-46-0P**, 4-(3-Chloro-4-fluorophenylamino)-6-[3-(4-piperidinyl)propyloxy]-7-methoxyquinazoline **295330-47-1P**, (S)-4-[(3-Bromophenyl)amino]-6-[(pyrrolidin-2-yl)methoxy]-7-methoxyquinazoline **295330-48-2P**, (R)-4-[(3-Bromophenyl)amino]-6-[(pyrrolidin-2-yl)methoxy]-7-methoxyquinazoline **295330-49-3P**, (S)-4-[(3-Chloro-4-fluorophenyl)amino]-6-[(pyrrolidin-2-yl)methoxy]-7-cyclopentyloxyquinazoline **295330-50-6P**, (S)-4-[(3-Chloro-4-fluorophenyl)amino]-6-[(pyrrolidin-2-yl)methoxy]-7-cyclopentylmethoxyquinazoline **295330-57-3P**, 4-[(3-Bromophenyl)amino]-6-(2-bromoethoxy)-7-methoxyquinazoline **295330-58-4P**, 4-[(3-Chloro-4-fluorophenyl)amino]-6-(2-bromoethoxy)-7-cyclopentyloxyquinazoline **295330-60-8P**, 4-[(3-Chloro-4-fluorophenyl)amino]-6-cyclopentyloxy-7-(2-bromoethoxy)quinazoline **295330-61-9P**, 4-[(3-Bromophenyl)amino]-6-hydroxy-7-methoxyquinazoline **295330-62-0P**, 4-[(3-Chloro-4-fluorophenyl)amino]-6-benzyloxy-7-hydroxyquinazoline **295330-63-1P**

, 4-[(3-Chloro-4-fluorophenyl)amino]-6-cyclopentyloxy-7-hydroxyquinazoline
295330-64-2P, 4-[(3-Bromophenyl)amino]-6-methylcarbonyloxy-7-methoxyquinazoline **295330-65-3P**, 4-[(3-Chloro-4-fluorophenyl)amino]-6-benzyloxy-7-(methylcarbonyloxy)quinazoline **295330-66-4P**, 4-[(3-Chloro-4-fluorophenyl)amino]-6-cyclopentyloxy-7-(methylcarbonyloxy)quinazoline **295330-67-5P**, 4-[(3-Bromophenyl)amino]-6-(oxiranylmethoxy)-7-methoxyquinazoline **295330-72-2P**, 4-[(3-Chloro-4-fluorophenyl)amino]-6-hydroxy-7-cyclopentyloxyquinazoline **295330-73-3P**, 4-[(3-Chloro-4-fluorophenyl)amino]-6-hydroxy-7-cyclopentylmethoxyquinazoline **295330-74-4P**, 4-[(3-Chloro-4-fluorophenyl)amino]-6-benzyloxy-7-cyclopentyloxyquinazoline **295330-75-5P**, 4-[(3-Chloro-4-fluorophenyl)amino]-6-benzyloxy-7-cyclopentylmethoxyquinazoline
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(intermediate; prepn. of quinazoline derivs. and other bicyclic heterocycles as tyrosine kinase inhibitors)

RN 295330-38-0 CAPLUS
CN 1-Piperazinecarboxylic acid, 4-[3-[[4-[(3-chloro-4-fluorophenyl)amino]-7-methoxy-6-quinazolinyl]oxy]propyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



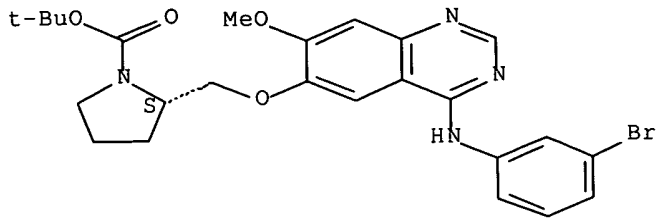
RN 295330-39-1 CAPLUS
CN 1-Piperidinecarboxylic acid, 4-[3-[[4-[(3-chloro-4-fluorophenyl)amino]-7-methoxy-6-quinazolinyl]oxy]propyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 295330-40-4 CAPLUS
CN 1-Pyrrolidinecarboxylic acid, 2-[[[4-[(3-bromophenyl)amino]-7-methoxy-6-quinazolinyl]oxy]methyl]-, 1,1-dimethylethyl ester, (2S)- (9CI) (CA

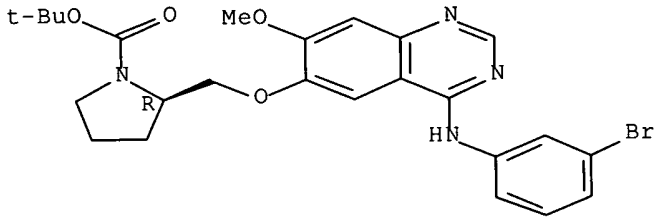
INDEX
NAME)

Absolute stereochemistry.



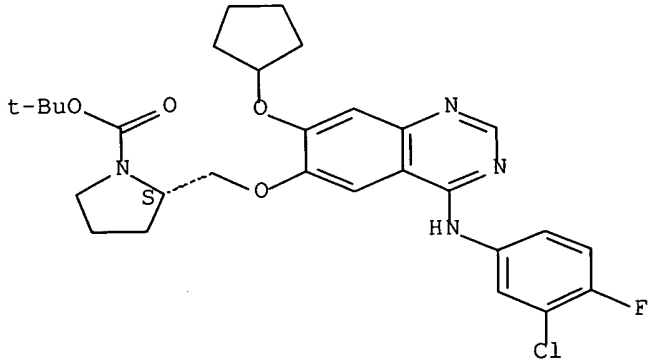
RN 295330-41-5 CAPLUS
CN 1-Pyrrolidinecarboxylic acid, 2-[[[4-[(3-bromophenyl)amino]-7-methoxy-6-quinazolinyl]oxy]methyl]-, 1,1-dimethylethyl ester, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 295330-42-6 CAPLUS
CN 1-Pyrrolidinecarboxylic acid, 2-[[[4-[(3-chloro-4-fluorophenyl)amino]-7-(cyclopentyloxy)-6-quinazolinyl]oxy]methyl]-, 1,1-dimethylethyl ester, (2S)- (9CI) (CA INDEX NAME)

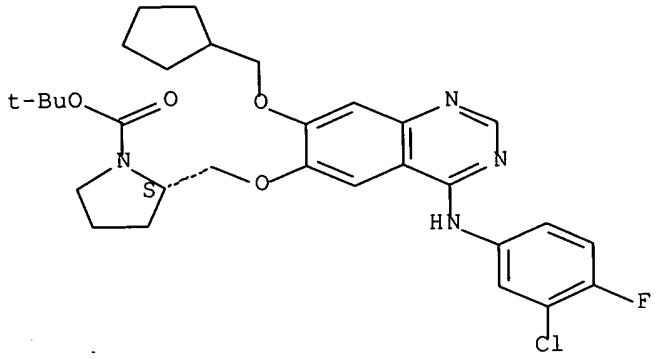
Absolute stereochemistry.



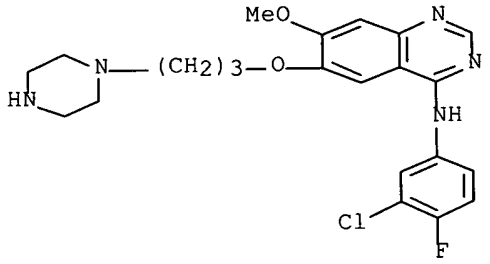
RN 295330-43-7 CAPLUS

CN 1-Pyrrolidinecarboxylic acid, 2-[[[4-[(3-chloro-4-fluorophenyl)amino]-7-(cyclopentylmethoxy)-6-quinazolinyl]oxy]methyl]-, 1,1-dimethylethyl ester,
(2S)- (9CI) (CA INDEX NAME)

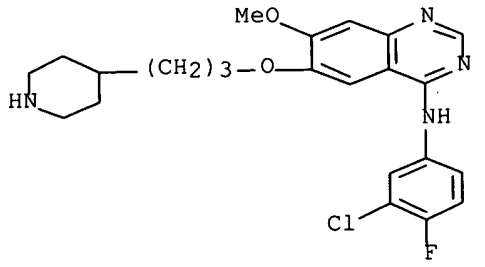
Absolute stereochemistry.



RN 295330-45-9 CAPLUS
CN 4-Quinazolinamine, N-(3-chloro-4-fluorophenyl)-7-methoxy-6-[3-(1-piperazinyl)propoxy]- (9CI) (CA INDEX NAME)



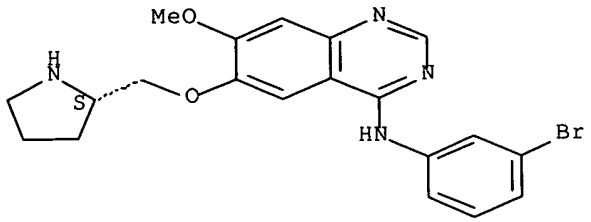
RN 295330-46-0 CAPLUS
CN 4-Quinazolinamine, N-(3-chloro-4-fluorophenyl)-7-methoxy-6-[3-(4-piperidinyl)propoxy]- (9CI) (CA INDEX NAME)



RN 295330-47-1 CAPLUS
CN 4-Quinazolinamine, N-(3-bromophenyl)-7-methoxy-6-[(2S)-2-

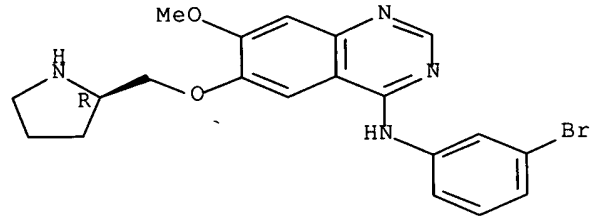
pyrrolidinylmethoxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



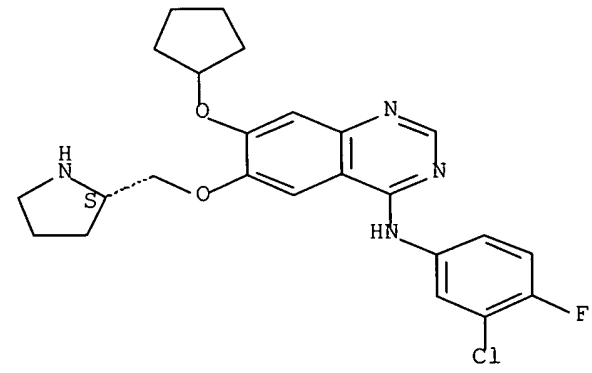
RN 295330-48-2 CAPLUS
CN 4-Quinazolinamine, N-(3-bromophenyl)-7-methoxy-6-[(2R)-2-pyrrolidinylmethoxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



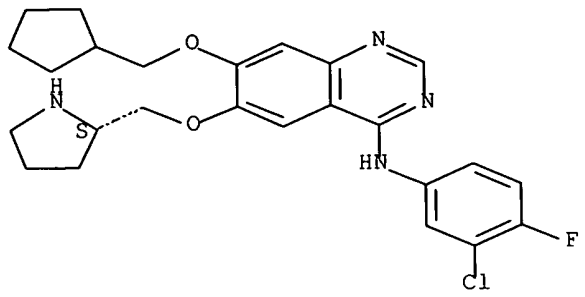
RN 295330-49-3 CAPLUS
CN 4-Quinazolinamine, N-(3-chloro-4-fluorophenyl)-7-(cyclopentyloxy)-6-[(2S)-2-pyrrolidinylmethoxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

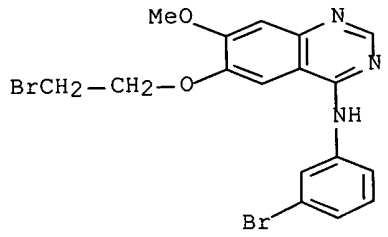


RN 295330-50-6 CAPLUS
CN 4-Quinazolinamine, N-(3-chloro-4-fluorophenyl)-7-(cyclopentylmethoxy)-6-[(2S)-2-pyrrolidinylmethoxy]- (9CI) (CA INDEX NAME)

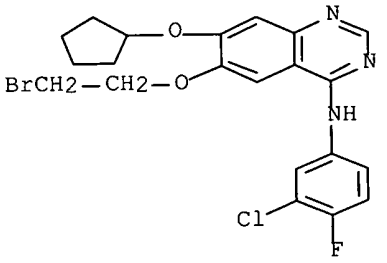
Absolute stereochemistry.



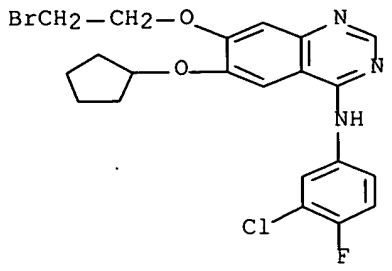
RN 295330-57-3 CAPLUS
CN 4-Quinazolinamine, 6-(2-bromoethoxy)-N-(3-bromophenyl)-7-methoxy- (9CI) (CA INDEX NAME)



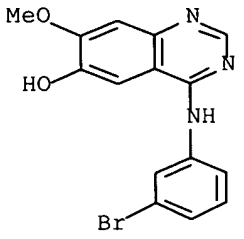
RN 295330-58-4 CAPLUS
CN 4-Quinazolinamine, 6-(2-bromoethoxy)-N-(3-chloro-4-fluorophenyl)-7-(cyclopentyloxy)- (9CI) (CA INDEX NAME)



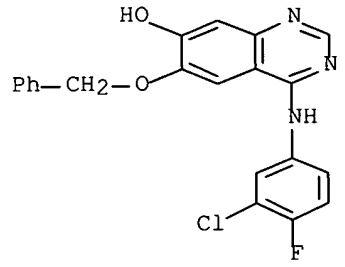
RN 295330-60-8 CAPLUS
CN 4-Quinazolinamine, 7-(2-bromoethoxy)-N-(3-chloro-4-fluorophenyl)-6-(cyclopentyloxy)- (9CI) (CA INDEX NAME)



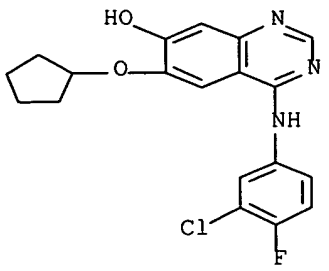
RN 295330-61-9 CAPLUS
CN 6-Quinazolinol, 4-[(3-bromophenyl)amino]-7-methoxy- (9CI) (CA INDEX NAME)



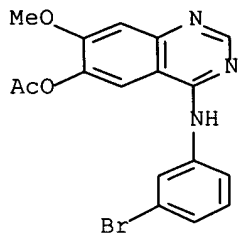
RN 295330-62-0 CAPLUS
CN 7-Quinazolinol, 4-[(3-chloro-4-fluorophenyl)amino]-6-(phenylmethoxy)-(9CI) (CA INDEX NAME)



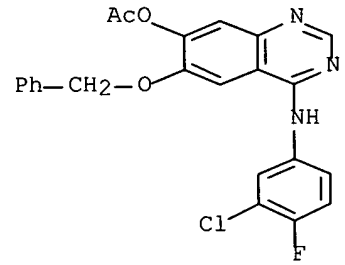
RN 295330-63-1 CAPLUS
CN 7-Quinazolinol, 4-[(3-chloro-4-fluorophenyl)amino]-6-(cyclopentyloxy)-(9CI) (CA INDEX NAME)



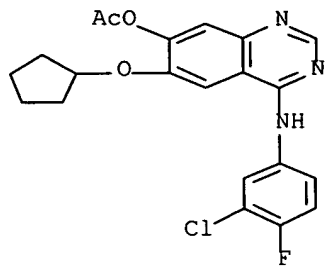
RN 295330-64-2 CAPLUS
CN 6-Quinazolinol, 4-[(3-bromophenyl)amino]-7-methoxy-, acetate (ester) (9CI)
(CA INDEX NAME)



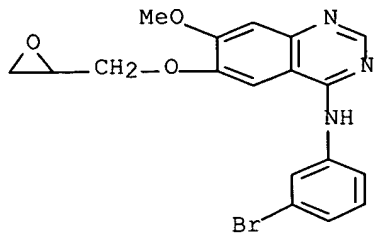
RN 295330-65-3 CAPLUS
CN 7-Quinazolinol, 4-[(3-chloro-4-fluorophenyl)amino]-6-(phenylmethoxy)-, acetate (ester) (9CI) (CA INDEX NAME)



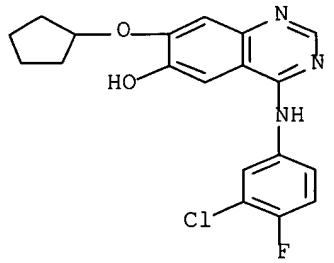
RN 295330-66-4 CAPLUS
CN 7-Quinazolinol, 4-[(3-chloro-4-fluorophenyl)amino]-6-(cyclopentyloxy)-, acetate (ester) (9CI) (CA INDEX NAME)



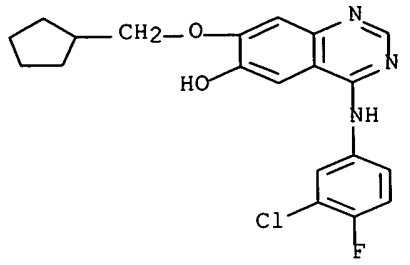
RN 295330-67-5 CAPLUS
CN 4-Quinazolinamine, N-(3-bromophenyl)-7-methoxy-6-(oxiranylmethoxy)-(9CI)
(CA INDEX NAME)



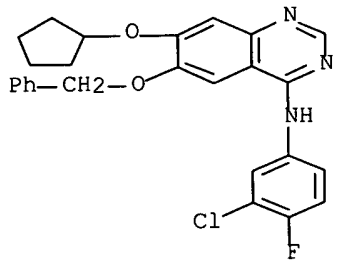
RN 295330-72-2 CAPLUS
CN 6-Quinazolinol, 4-[(3-chloro-4-fluorophenyl)amino]-7-(cyclopentyloxy)-(9CI) (CA INDEX NAME)



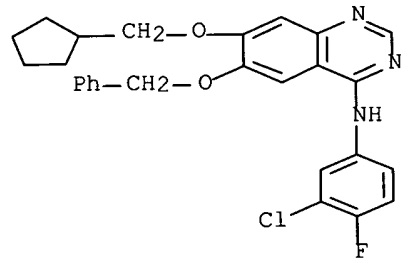
RN 295330-73-3 CAPLUS
CN 6-Quinazolinol, 4-[(3-chloro-4-fluorophenyl)amino]-7-(cyclopentylmethoxy)-
(9CI) (CA INDEX NAME)



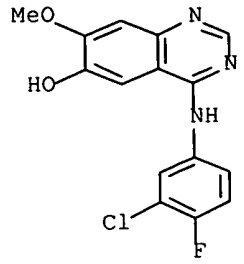
RN 295330-74-4 CAPLUS
CN 4-Quinazolinamine, N-(3-chloro-4-fluorophenyl)-7-(cyclopentyloxy)-6-(phenylmethoxy)- (9CI) (CA INDEX NAME)



RN 295330-75-5 CAPLUS
CN 4-Quinazolinamine, N-(3-chloro-4-fluorophenyl)-7-(cyclopentylmethoxy)-6-(phenylmethoxy)- (9CI) (CA INDEX NAME)



IT **184475-71-6**, 4-(3-Chloro-4-fluorophenylamino)-6-hydroxy-7-methoxyquinazoline
RL: RCT (Reactant)
(starting material; prepn. of quinazoline derivs. and other bicyclic heterocycles as tyrosine kinase inhibitors)
RN 184475-71-6 CAPLUS
CN 6-Quinazolinol, 4-[(3-chloro-4-fluorophenyl)amino]-7-methoxy- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 5 OF 13 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:144864 CAPLUS
DOCUMENT NUMBER: 132:189690
TITLE: Therapeutic uses of quinazoline derivatives as JAK-3 kinase inhibitors
INVENTOR(S): Navara, Christopher S.; Mahajan, Sandeep; Uckun, Fatih M.
PATENT ASSIGNEE(S): Hughes Institute, USA
SOURCE: PCT Int. Appl., 131 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000010981	A1	20000302	WO 1999-US19043	19990820
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9956827	A1	20000314	AU 1999-56827	19990820
EP 1105378	A1	20010613	EP 1999-943800	19990820
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
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NO 2001000887	A	20010423	NO 2001-887	20010221
US 2001044442	A1	20011122	US 2001-812098	20010319

PRIORITY APPLN. INFO.:
US 1998-97359 P 19980821
US 1998-97365 P 19980821
US 1999-378093 A1 19990820
WO 1999-US19043 W 19990820

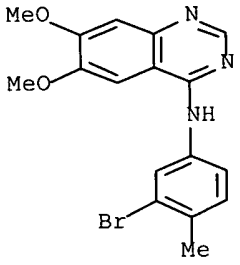
OTHER SOURCE(S): MARPAT 132:189690

AB The invention provides novel JAK-3 kinase inhibitors that are useful for treating leukemia and lymphoma. The compds. are also useful to treat or prevent skin cancer, as well as sunburn and UVB-induced skin **inflammation**. In addn., the compds. of the present invention prevent the immunosuppressive effects of UVB radiation, and are useful to treat or prevent autoimmune diseases, **inflammation**, and transplant rejection. The invention also provides pharmaceutical compns. comprising compds. of the invention, as well as therapeutic methods for their use. For example, treatments with 50 mg/kg or 75 mg/kg of a quinazoline deriv. WHI-P131 (prepn. given) were as effective as cyclosporin A treatment in prolongation of islet allograft survival in mice.

IT **211555-06-5P**, WHI-P 111
RL: BAC (Biological activity or effector, except adverse); PNU (Preparation, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(WHI-P 111; therapeutic uses of quinazoline derivs. as JAK-3 kinase inhibitors)

RN 211555-06-5 CAPLUS

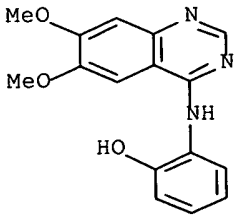
CN 4-Quinazolinamine, N-(3-bromo-4-methylphenyl)-6,7-dimethoxy- (9CI) (CA INDEX NAME)



IT **211555-07-6P**, WHI-P 132
RL: BAC (Biological activity or effector, except adverse); PNU (Preparation, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(WHI-P 132; therapeutic uses of quinazoline derivs. as JAK-3 kinase inhibitors)

RN 211555-07-6 CAPLUS

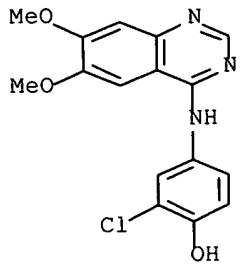
CN Phenol, 2-[(6,7-dimethoxy-4-quinazolinyl)amino]- (9CI) (CA INDEX NAME)



IT **211555-09-8P**, WHI-P 197

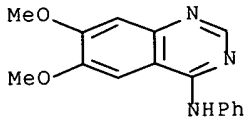
RL: BAC (Biological activity or effector, except adverse); PNU (Preparation, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(WHI-P 197; therapeutic uses of quinazoline derivs. as JAK-3 kinase inhibitors)

RN 211555-09-8 CAPLUS
CN Phenol, 2-chloro-4-[(6,7-dimethoxy-4-quinazolinyl)amino]- (9CI) (CA INDEX NAME)



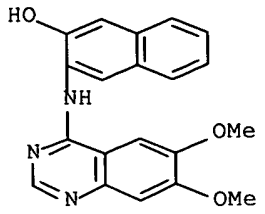
IT **21561-09-1P**, WHI-P 258
RL: BAC (Biological activity or effector, except adverse); PNU (Preparation, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(WHI-P 258; therapeutic uses of quinazoline derivs. as JAK-3 kinase inhibitors)

RN 21561-09-1 CAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-phenyl- (9CI) (CA INDEX NAME)

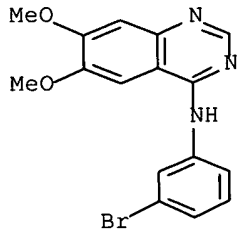


IT **251376-04-2P**, WHI-P 292
RL: BAC (Biological activity or effector, except adverse); PNU (Preparation, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(WHI-P 292; therapeutic uses of quinazoline derivs. as JAK-3 kinase inhibitors)

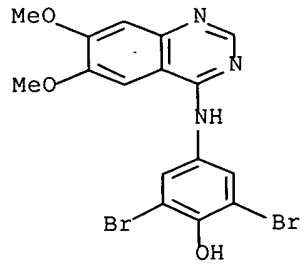
RN 251376-04-2 CAPLUS
CN 2-Naphthalenol, 3-[(6,7-dimethoxy-4-quinazolinyl)amino]- (9CI) (CA INDEX NAME)



IT **153436-54-5P**, WHI-P 79
RL: BAC (Biological activity or effector, except adverse); PNU (Preparation, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(WHI-P 79; therapeutic uses of quinazoline derivs. as JAK-3 kinase inhibitors)
RN 153436-54-5 CAPLUS
CN 4-Quinazolinamine, N-(3-bromophenyl)-6,7-dimethoxy- (9CI) (CA INDEX NAME)



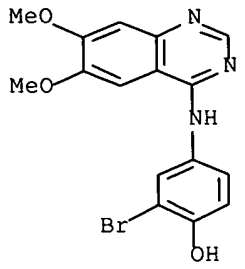
IT **211555-05-4P**, WHI-P 97
RL: BAC (Biological activity or effector, except adverse); PNU (Preparation, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(WHI-P 97; therapeutic uses of quinazoline derivs. as JAK-3 kinase inhibitors)
RN 211555-05-4 CAPLUS
CN Phenol, 2,6-dibromo-4-[(6,7-dimethoxy-4-quinazolinyl)amino]- (9CI) (CA INDEX NAME)



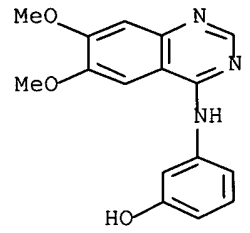
IT **211555-04-3P**, WHI-P154 **211555-08-7P**, WHI-P180
247080-98-4P, WHI-P 112
RL: BAC (Biological activity or effector, except adverse); PNU

(Preparation, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(therapeutic uses of quinazoline derivs. as JAK-3 kinase inhibitors)

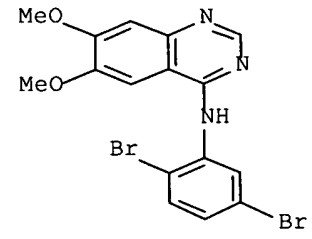
RN 211555-04-3 CAPLUS
CN Phenol, 2-bromo-4-[(6,7-dimethoxy-4-quinazolinyl)amino]- (9CI) (CA INDEX NAME)



RN 211555-08-7 CAPLUS
CN Phenol, 3-[(6,7-dimethoxy-4-quinazolinyl)amino]- (9CI) (CA INDEX NAME)

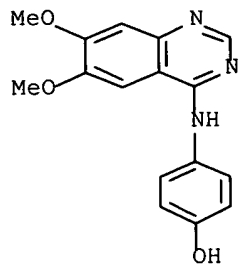


RN 247080-98-4 CAPLUS
CN 4-Quinazolinamine, N-(2,5-dibromophenyl)-6,7-dimethoxy- (9CI) (CA INDEX NAME)



IT **202475-60-3P**, WHI-P131
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(therapeutic uses of quinazoline derivs. as JAK-3 kinase inhibitors)

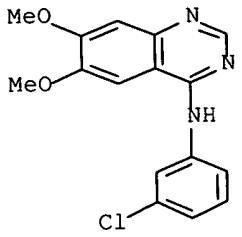
RN 202475-60-3 CAPLUS
CN Phenol, 4-[(6,7-dimethoxy-4-quinazolinyl)amino]- (9CI) (CA INDEX NAME)



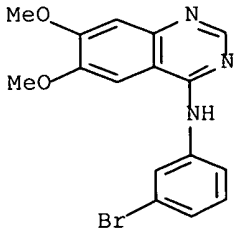
REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L16 ANSWER 6 OF 13 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:22595 CAPLUS
DOCUMENT NUMBER: 132:288733
TITLE: Growth inhibition of psoriatic keratinocytes by quinazoline tyrosine kinase inhibitors
AUTHOR(S): Powell, T. J.; Ben-Bassat, H.; Klein, B. Y.; Chen, H.; Shenoy, N.; McCollough, J.; Narog, B.; Gazit, A.; Harzstark, Z.; Chaouat, M.; Levitzki, R.; Tang, C.; McMahon, J.; Shawver, L.; Levitzki, A.
CORPORATE SOURCE: SUGEN, Inc., Redwood Citu, CA, 94063, USA
SOURCE: Br. J. Dermatol. (1999), 141(5), 802-810
CODEN: BJDEAZ; ISSN: 0007-0963
PUBLISHER: Blackwell Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Psoriasis is characterized by hyperproliferation of keratinocytes assocd. with an **inflammatory** infiltrate in the epidermis. Among factors which may be related to hyperplasia of psoriatic keratinocytes is the persistent autocrine stimulation of the epidermal growth factor receptor (EGFR) by transforming growth factor-.alpha.. Owing to the pivotal role of the EGFR in driving the growth of human psoriatic keratinocytes, we examd. two selective inhibitors of EGFR kinase activity: 4-(3-bromophenylamino)-6,7-dimethoxyquinazoline (AG1517/SU5271) and 4-(3-chlorophenylamino)-6,7-dimethoxyquinazoline (AG1478) on psoriatic keratinocytes. SU5271 potently inhibits ligand-induced autophosphorylation of EGFR, and downstream signal transduction events, including DNA replication and cell cycle progression. SU5271, at micromolar concns., inhibited the proliferation of keratinocytes isolated from psoriatic lesions in excellent correlation with its EGFR kinase inhibitory activity in these cells. Biol. active concns. of SU5271 penetrated human cadaver skin, suggesting that this compd. is a strong candidate as an antipsoriatic agent.
IT **153436-53-4**, AG1478

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); THU (Therapeutic use); BIOL (Biological study); PROC (Process);
USES (Uses)
(growth inhibition of psoriatic keratinocytes by quinazoline tyrosine kinase inhibitors via inhibition of EGF signaling)
RN 153436-53-4 CAPLUS
CN 4-Quinazolinamine, N-(3-chlorophenyl)-6,7-dimethoxy- (9CI) (CA INDEX NAME)



IT **153436-54-5**, AG 1517
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); THU (Therapeutic use); BIOL (Biological study); PROC (Process);
USES (Uses)
(vgrowth inhibition of psoriatic keratinocytes by quinazoline tyrosine kinase inhibitors via inhibition of EGF signaling)
RN 153436-54-5 CAPLUS
CN 4-Quinazolinamine, N-(3-bromophenyl)-6,7-dimethoxy- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 7 OF 13 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:784082 CAPLUS
DOCUMENT NUMBER: 132:22963
TITLE: Preparation of N-(pyrazolylphenyl)alkanamides and analogs as IL-2 production inhibitors

INVENTOR(S): Betageri, Rajashekhar; Cywin, Charles L.; Hargrave, Karl; Hoermmann, Mary Ann; Kirrane, Thomas M.; Parks, Thomas M.; Patel, Usha R.; Proudfoot, John R.; Sharma, Rajiv; Sun, Sanxing; Wang, Xiao-Jun

PATENT ASSIGNEE(S): Boehringer Ingelheim Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 130 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

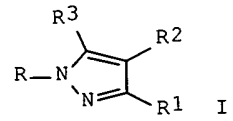
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9962885	A1	19991209	WO 1999-US12295	19990603
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW				
AU 9942299	A1	19991220	AU 1999-42299	19990603

PRIORITY APPLN. INFO.: US 1998-88154 P 19980605
WO 1999-US12295 W 19990603

OTHER SOURCE(S): MARPAT 132:22963

GI



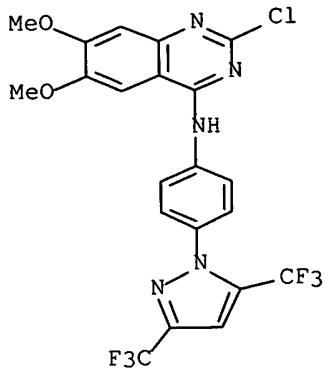
I

AB Title compds. [I; R = R4Z1Z; R1,R3 = halo, CF3, alkyl, alkoxy, etc.; R2 = H, halo, Me; R4 = (cyclo)alkyl, alkoxy, alkylamino, etc.; Z = 1,4-phenylene; Z1 = CONH, CO2NH, NH, etc.] were prepd. Thus, I [R = 4-(R5HN)C6H4, R1 = R3 = CF3, R2 = H](II; R5 = H) was amidated by cyclohexanecarboxylic acid to give II (R5 = cyclohexylcarbonyl). Data for biol. activity of I were given.

IT **251657-95-1P**
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of 1-(4-aminophenyl)pyrazoles and their use as anti-**inflammatory** agents)

RN 251657-95-1 CAPLUS

CN 4-Quinazolinamine, N-[4-[3,5-bis(trifluoromethyl)-1H-pyrazol-1-yl]phenyl]-2-chloro-6,7-dimethoxy- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L16 ANSWER 8 OF 13 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:659226 CAPLUS
DOCUMENT NUMBER: 131:281600
TITLE: Methods and compositions for reducing UV-induced inhibition of collagen synthesis in human skin
INVENTOR(S): Fisher, Gary J.; Voorhees, John J.
PATENT ASSIGNEE(S): The Regents of the University of Michigan, USA
SOURCE: PCT Int. Appl., 52 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9951220	A1	19991014	WO 1999-US7267	19990402
W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GD, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9936374	A1	19991025	AU 1999-36374	19990402
AU 740569	B2	20011108		
BR 9909899	A	20001226	BR 1999-9899	19990402
EP 1067920	A1	20010117	EP 1999-918456	19990402
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				

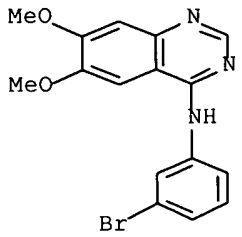
PRIORITY APPLN. INFO.: US 1998-80437 P 19980402
WO 1999-US7267 W 19990402

AB Exposure of human skin to UV (**UV**) **radiation** from the sun not only induces the prodn. of enzymes (matrix metalloproteinases) that degrade collagen, but also inhibits the synthesis of new collagen by

inhibiting the synthesis of procollagen. This UV-induced inhibition of the synthesis of collagen can be prevented by the topical application of a retinoid or c-JUN inhibitor to the skin prior to its exposure to **UV radiation**. It was shown that retinoids such as retinoic acid protect human skin in vivo against the UV-induced inhibition of collagen synthesis.

IT **153436-54-5**, PD 153035
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(ionophore or G-protein or EGF receptor antagonist; retinoids for reducing UV-induced inhibition of collagen synthesis in human skin)

RN 153436-54-5 CAPLUS
CN 4-Quinazolinamine, N-(3-bromophenyl)-6,7-dimethoxy- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 9 OF 13 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:105843 CAPLUS
DOCUMENT NUMBER: 128:136497
TITLE: Aryl and heteroaryl quinazoline compounds which inhibit EGF and/or PDGF receptor tyrosine kinase
INVENTOR(S): Myers, Michael R.; Spada, Alfred P.; Maguire, Martin P.; Persons, Paul E.
PATENT ASSIGNEE(S): Rhone-Poulenc Rorer Pharmaceuticals Inc., USA
SOURCE: U.S., 19 pp. Cont.-in-part of U.S. 5,480,883.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 7
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5710158	A	19980120	US 1994-229886	19940419
US 5480883	A	19960102	US 1993-166199	19931210
WO 9515758	A1	19950615	WO 1994-US14180	19941208

W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US, UZ, VN

RW: KE, MW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

AU 9513050	A1	19950627	AU 1995-13050	19941208
EP 871448	A1	19981021	EP 1995-904308	19941208
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE				
US 5656643	A	19970812	US 1995-385258	19950208
US 5714493	A	19980203	US 1996-652444	19960604

PRIORITY APPLN. INFO.:

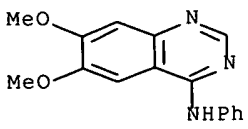
US 1991-698420	19910510
US 1992-988515	19921210
US 1993-166199	19931210
US 1993-146072	19931108
US 1994-229886	19940419
WO 1994-US14180	19941208

OTHER SOURCE(S): MARPAT 128:136497

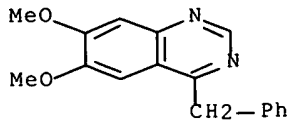
AB This invention relates to the modulation and/or inhibition of cell signaling, cell proliferation, cell **inflammatory** response, the control of abnormal cell growth and cell reprodn. More specifically, this invention relates to the use of mono- and/or bicyclic aryl or heteroaryl quinazoline compds. in inhibiting cell proliferation, including compds. which are useful protein tyrosine kinase (PTK) inhibitors. The method of treating cell proliferation using said quinazoline compds. and their use in pharmaceutical compns. is described. A no. of compds. were tested for inhibition of PDGF receptor cell-free antophosphorylation procedure.

IT **21561-09-1 37514-62-8 153436-53-4**
153437-65-1 153437-80-0 167410-34-6
167410-65-3 167410-67-5 167410-69-7
174891-29-3 174892-57-0 174892-58-1
186138-04-5 202475-38-5 202475-41-0
202475-44-3 202475-49-8 202475-51-2
202475-54-5 202475-55-6 202475-57-8
202475-58-9 202475-59-0 202475-60-3
202475-61-4 202475-62-5 202475-63-6
202475-64-7 202475-65-8 202475-66-9
202475-67-0 202475-70-5 202475-71-6
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(aryl and heteroaryl quinazoline compds. which inhibit EGF and/or PDGF receptor tyrosine kinase)

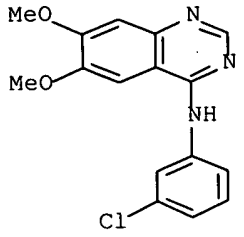
RN 21561-09-1 CAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-phenyl- (9CI) (CA INDEX NAME)



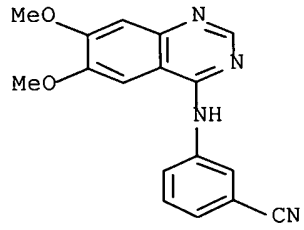
RN 37514-62-8 CAPLUS
CN Quinazoline, 6,7-dimethoxy-4-(phenylmethyl)- (9CI) (CA INDEX NAME)



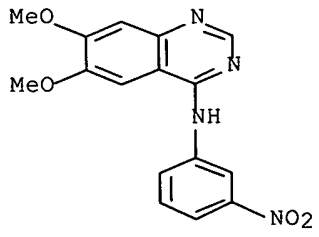
RN 153436-53-4 CAPLUS
CN 4-Quinazolinamine, N-(3-chlorophenyl)-6,7-dimethoxy- (9CI) (CA INDEX NAME)



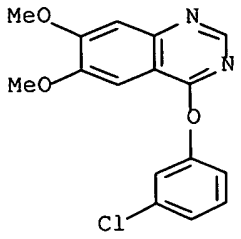
RN 153437-65-1 CAPLUS
CN Benzonitrile, 3-[(6,7-dimethoxy-4-quinazolinyl)amino]- (9CI) (CA INDEX NAME)



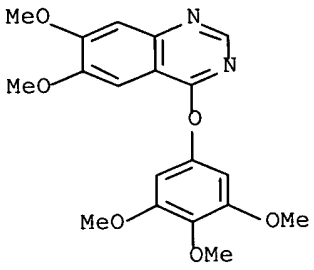
RN 153437-80-0 CAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-(3-nitrophenyl)- (9CI) (CA INDEX NAME)



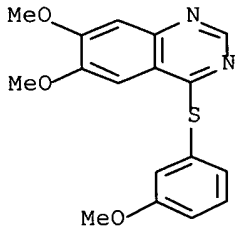
RN 167410-34-6 CAPLUS
CN Quinazoline, 4-(3-chlorophenoxy)-6,7-dimethoxy- (9CI) (CA INDEX NAME)



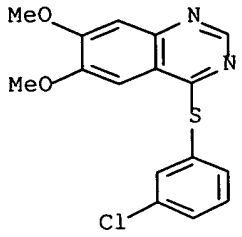
RN 167410-65-3 CAPLUS
CN Quinazoline, 6,7-dimethoxy-4-(3,4,5-trimethoxyphenoxy)- (9CI) (CA INDEX NAME)



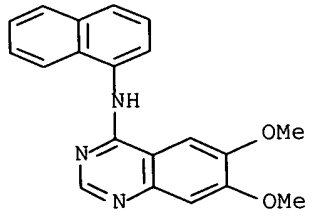
RN 167410-67-5 CAPLUS
CN Quinazoline, 6,7-dimethoxy-4-[(3-methoxyphenyl)thio]- (9CI) (CA INDEX NAME)



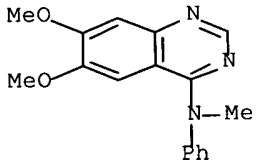
RN 167410-69-7 CAPLUS
CN Quinazoline, 4-[(3-chlorophenyl)thio]-6,7-dimethoxy- (9CI) (CA INDEX NAME)



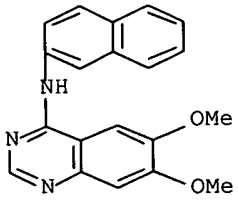
RN 174891-29-3 CAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-1-naphthalenyl- (9CI) (CA INDEX NAME)



RN 174892-57-0 CAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-methyl-N-phenyl- (9CI) (CA INDEX NAME)

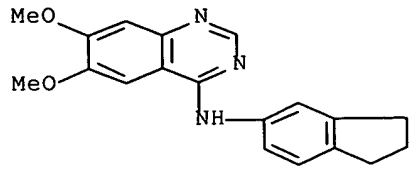


RN 174892-58-1 CAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-2-naphthalenyl- (9CI) (CA INDEX NAME)

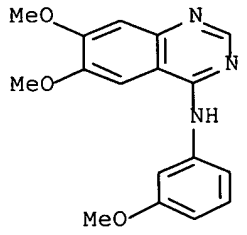


RN 186138-04-5 CAPLUS
CN 4-Quinazolinamine, N-(2,3-dihydro-1H-inden-5-yl)-6,7-dimethoxy- (9CI) (CA

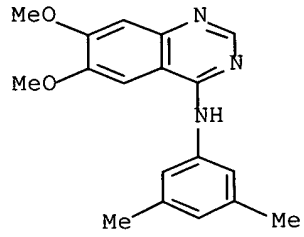
INDEX NAME)



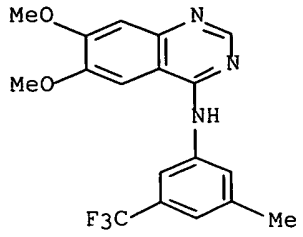
RN 202475-38-5 CAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-(3-methoxyphenyl)- (9CI) (CA INDEX NAME)



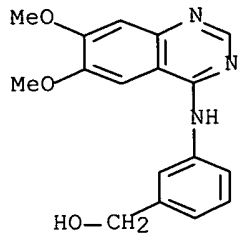
RN 202475-41-0 CAPLUS
CN 4-Quinazolinamine, N-(3,5-dimethylphenyl)-6,7-dimethoxy- (9CI) (CA INDEX
NAME)



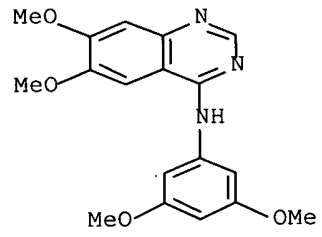
RN 202475-44-3 CAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-[3-methyl-5-(trifluoromethyl)phenyl]-(9CI) (CA INDEX NAME)



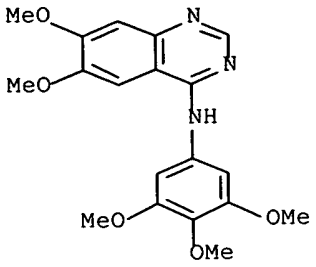
RN 202475-49-8 CAPLUS
CN Benzenemethanol, 3-[(6,7-dimethoxy-4-quinazolinyl)amino]- (9CI) (CA INDEX
NAME)



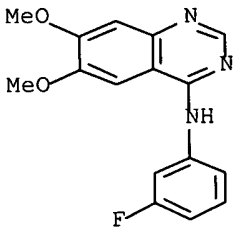
RN 202475-51-2 CAPLUS
CN 4-Quinazolinamine, N-(3,5-dimethoxyphenyl)-6,7-dimethoxy- (9CI) (CA INDEX
NAME)



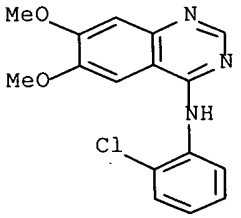
RN 202475-54-5 CAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-(3,4,5-trimethoxyphenyl)- (9CI) (CA INDEX NAME)



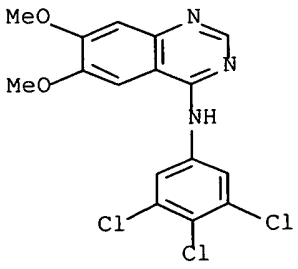
RN 202475-55-6 CAPLUS
CN 4-Quinazolinamine, N-(3-fluorophenyl)-6,7-dimethoxy- (9CI) (CA INDEX NAME)



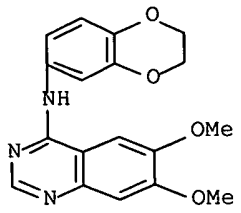
RN 202475-57-8 CAPLUS
CN 4-Quinazolinamine, N-(2-chlorophenyl)-6,7-dimethoxy- (9CI) (CA INDEX NAME)



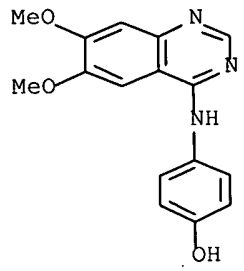
RN 202475-58-9 CAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-(3,4,5-trichlorophenyl)- (9CI) (CA INDEX NAME)



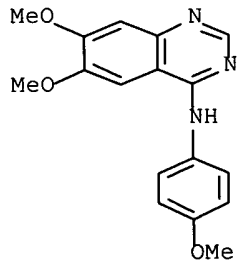
RN 202475-59-0 CAPLUS
CN 4-Quinazolinamine, N-(2,3-dihydro-1,4-benzodioxin-6-yl)-6,7-dimethoxy- (9CI) (CA INDEX NAME)



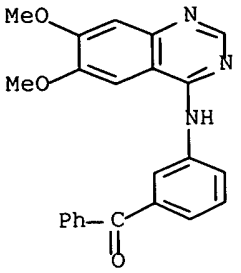
RN 202475-60-3 CAPLUS
CN Phenol, 4-[(6,7-dimethoxy-4-quinazolinyl)amino]- (9CI) (CA INDEX NAME)



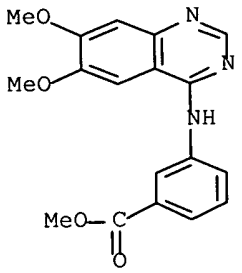
RN 202475-61-4 CAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



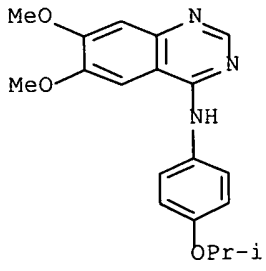
RN 202475-62-5 CAPLUS
CN Methanone, [3-[(6,7-dimethoxy-4-quinazolinyl)amino]phenyl]phenyl- (9CI) (CA INDEX NAME)



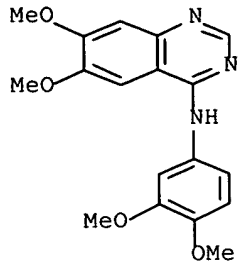
RN 202475-63-6 CAPLUS
CN Benzoic acid, 3-[(6,7-dimethoxy-4-quinazolinyl)amino]-, methyl ester (9CI)
(CA INDEX NAME)



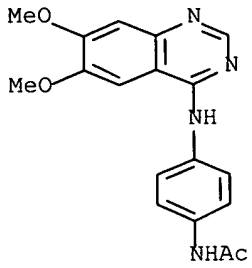
RN 202475-64-7 CAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-[4-(1-methylethoxy)phenyl]- (9CI) (CA
INDEX NAME)



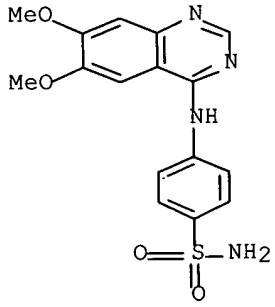
RN 202475-65-8 CAPLUS
CN 4-Quinazolinamine, N-(3,4-dimethoxyphenyl)-6,7-dimethoxy- (9CI) (CA INDEX
NAME)



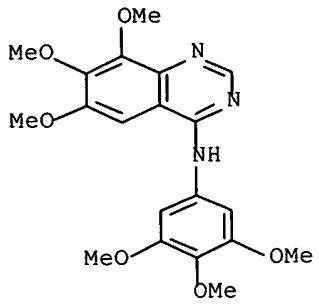
RN 202475-66-9 CAPLUS
CN Acetamide, N-[4-[(6,7-dimethoxy-4-quinazolinyl)amino]phenyl]- (9CI) (CA INDEX NAME)



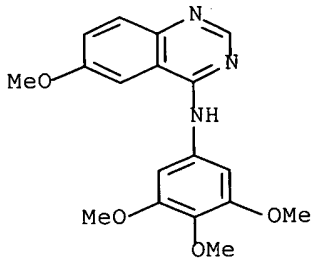
RN 202475-67-0 CAPLUS
CN Benzenesulfonamide, 4-[(6,7-dimethoxy-4-quinazolinyl)amino]- (9CI) (CA INDEX NAME)



RN 202475-70-5 CAPLUS
CN 4-Quinazolinamine, 6,7,8-trimethoxy-N-(3,4,5-trimethoxyphenyl)- (9CI) (CA
INDEX NAME)



RN 202475-71-6 CAPLUS
CN 4-Quinazolinamine, 6-methoxy-N-(3,4,5-trimethoxyphenyl)- (9CI) (CA INDEX
NAME)



L16 ANSWER 10 OF 13 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:98053 CAPLUS
DOCUMENT NUMBER: 128:154094
TITLE: Preparation of (hetero)arylquinazolines which inhibit
CSF-1R receptor tyrosine kinase.
INVENTOR(S): Myers, Michael R.; Spada, Alfred P.; Maguire, Martin P.; Persons, Paul E.; Zilberstein, Asher; Hsu, Chin-Yi
Jenny; Johnson, Susan E.
PATENT ASSIGNEE(S): Rhone-Poulenc Rorer Pharmaceuticals, Inc., USA
SOURCE: U.S., 11 pp. Cont.-in-part of U.S. Ser. No. 229,886.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 7
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5714493	A	19980203	US 1996-652444	19960604
US 5480883	A	19960102	US 1993-166199	19931210
US 5710158	A	19980120	US 1994-229886	19940419
WO 9515758	A1	19950615	WO 1994-US14180	19941208

W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB,

GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW,
NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US, UZ,
VN
RW: KE, MW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU,
MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN,
TD, TG

US 5656643	A	19970812	US 1995-385258	19950208
PRIORITY APPLN. INFO.:			US 1991-698420	19910510
			US 1992-988515	19921210
			US 1993-166199	19931210
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			US 1993-146072	19931108

OTHER SOURCE(S): MARPAT 128:154094
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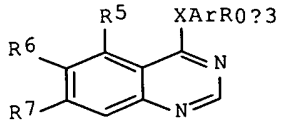

I

AB Title compds. [I; Ar = (substituted) mono- or bicyclic aryl, heteroaryl; X
= bond, O, S, SO, SO2, OCH2, C:C, C.tplbond.C, CS, SCH2, NH, NHCH2, NR4, NR4CH2; R = H, alkyl, alkenyl, Ph, aralkyl, aralkenyl, hydroxy, hydroxyalkyl, alkoxy, alkoxyalkyl, aralkoxy, aryloxy, acyloxy, halo, haloalkyl, NO2, cyano, amino, acylamino, CO2H, carboxyalkyl, carbalkoxy, carbaralkoxy, carbalkoxyalkyl, carbalkoxyalkenyl, aminoalkoxy, amido, alkylthio, alkylsulfinyl, sulfonyl, sulfamoyl, halophenyl, PhCO; RR = ketone group; R4 = alkyl, CH2CH2, (CH2)3; R5-R7 = H, alkyl, alkylthio, cycloalkyl, OH, alkoxy, aralkoxy, aryl, halo, haloalkyl, CO2H, carboalkoxy; ;with provisos], were prepd. Thus, 3-chlorophenol was stirred with NaH in THF; 4-chloro-6,7-dimethoxyquinazoline was added and the mixt. was stirred overnight to give 4-(3-chlorophenoxy)-6,7-dimethoxyquinazoline. I inhibited CSF-1R activity with IC50 = 0.18 .mu.M
to >100 .mu.M.

IT **37514-62-8P 159737-62-9P 167410-34-6P**
167410-48-2P 167410-51-7P 167410-52-8P
167410-55-1P 167410-58-4P 167410-59-5P
167410-61-9P 167410-66-4P 167410-67-5P
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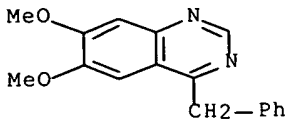
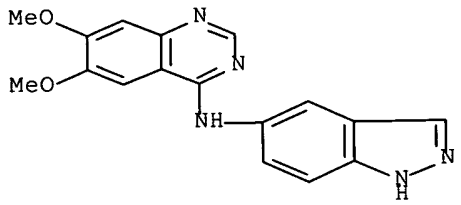
167410-72-2P 167410-73-3P 167410-74-4P
167410-75-5P 167410-76-6P 167410-77-7P
167410-78-8P 167410-79-9P 167410-80-2P
167410-81-3P 174892-22-9P 174892-24-1P
202475-54-5P
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic
preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of (hetero)arylquinazolines which inhibit CSF-1R receptor tyrosine kinase)

RN 37514-62-8 CAPLUS
CN Quinazoline, 6,7-dimethoxy-4-(phenylmethyl)- (9CI) (CA INDEX NAME)

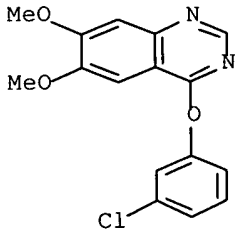


RN 159737-62-9 CAPLUS
CN 4-Quinazolinamine, N-1H-indazol-5-yl-6,7-dimethoxy-, monohydrochloride (9CI) (CA INDEX NAME)

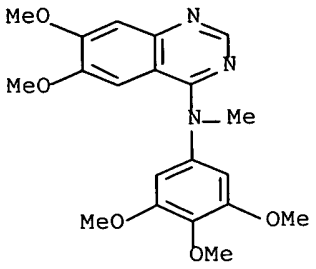


● HCl

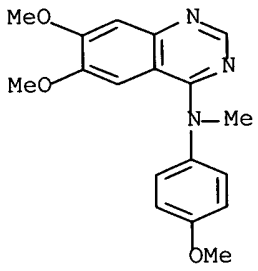
RN 167410-34-6 CAPLUS
CN Quinazoline, 4-(3-chlorophenoxy)-6,7-dimethoxy- (9CI) (CA INDEX NAME)



RN 167410-48-2 CAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-methyl-N-(3,4,5-trimethoxyphenyl)- (9CI) (CA INDEX NAME)

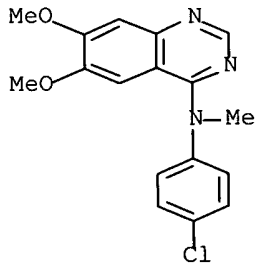


RN 167410-51-7 CAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-(4-methoxyphenyl)-N-methyl-, monohydrochloride (9CI) (CA INDEX NAME)



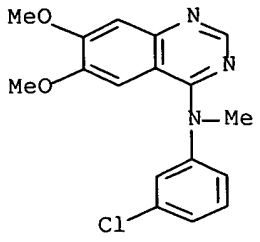
● HCl

RN 167410-52-8 CAPLUS
CN 4-Quinazolinamine, N-(4-chlorophenyl)-6,7-dimethoxy-N-methyl-, monohydrochloride (9CI) (CA INDEX NAME)



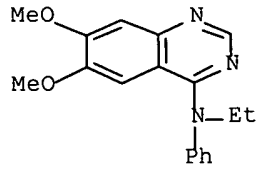
● HCl

RN 167410-55-1 CAPLUS
CN 4-Quinazolinamine, N-(3-chlorophenyl)-6,7-dimethoxy-N-methyl-, monohydrochloride (9CI) (CA INDEX NAME)



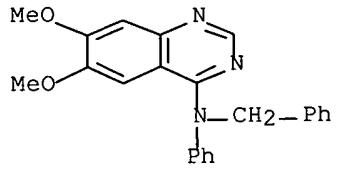
● HCl

RN 167410-58-4 CAPLUS
CN 4-Quinazolinamine, N-ethyl-6,7-dimethoxy-N-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)



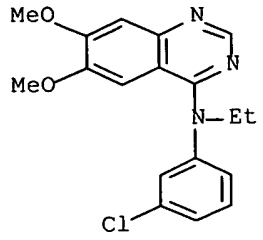
● HCl

RN 167410-59-5 CAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-phenyl-N-(phenylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)



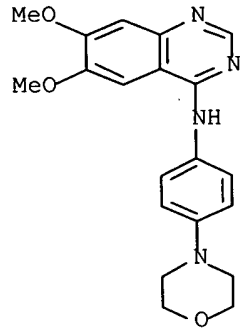
● HCl

RN 167410-61-9 CAPLUS
CN 4-Quinazolinamine, N-(3-chlorophenyl)-N-ethyl-6,7-dimethoxy-, monohydrochloride (9CI) (CA INDEX NAME)



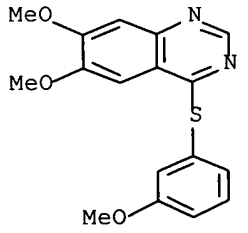
● HCl

RN 167410-66-4 CAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-[4-(4-morpholinyl)phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)

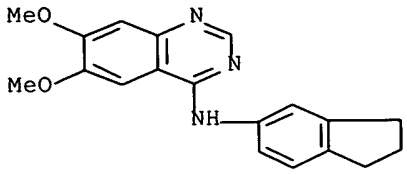


● HCl

RN 167410-67-5 CAPLUS
CN Quinazoline, 6,7-dimethoxy-4-[(3-methoxyphenyl)thio]- (9CI) (CA INDEX NAME)

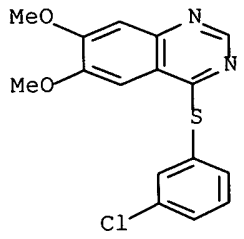


RN 167410-68-6 CAPLUS
CN 4-Quinazolinamine, N-(2,3-dihydro-1H-inden-5-yl)-6,7-dimethoxy-, monohydrochloride (9CI) (CA INDEX NAME)

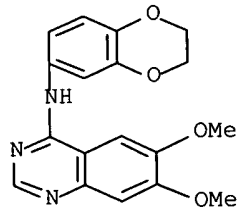


● HCl

RN 167410-69-7 CAPLUS
CN Quinazoline, 4-[(3-chlorophenyl)thio]-6,7-dimethoxy- (9CI) (CA INDEX NAME)

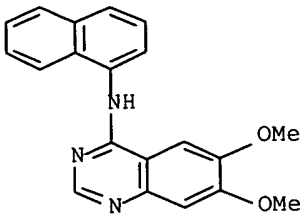


RN 167410-71-1 CAPLUS
CN 4-Quinazolinamine, N-(2,3-dihydro-1,4-benzodioxin-6-yl)-6,7-dimethoxy-, monohydrochloride (9CI) (CA INDEX NAME)



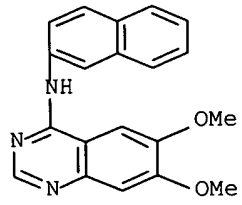
● HCl

RN 167410-72-2 CAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-1-naphthalenyl-, monohydrochloride (9CI) (CA INDEX NAME)



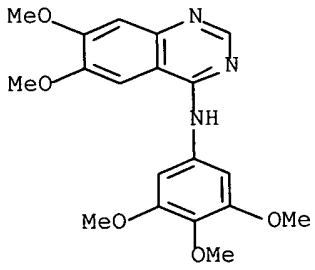
● HCl

RN 167410-73-3 CAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-2-naphthalenyl-, monohydrochloride (9CI) (CA INDEX NAME)



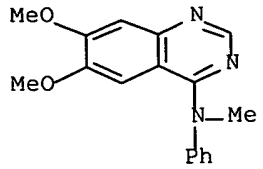
● HCl

RN 167410-74-4 CAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-(3,4,5-trimethoxyphenyl)-, monohydrochloride (9CI) (CA INDEX NAME)



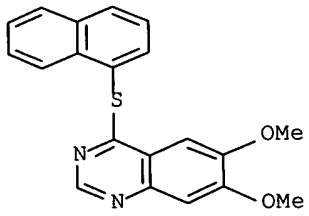
● HCl

RN 167410-75-5 CAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-methyl-N-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)

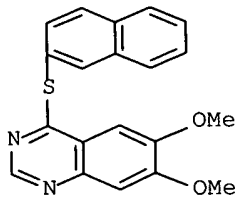


● HCl

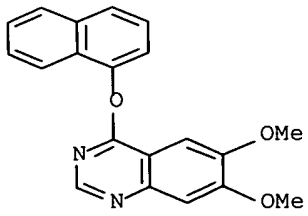
RN 167410-76-6 CAPLUS
CN Quinazoline, 6,7-dimethoxy-4-(1-naphthalenylthio)- (9CI) (CA INDEX NAME)



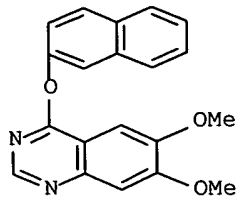
RN 167410-77-7 CAPLUS
CN Quinazoline, 6,7-dimethoxy-4-(2-naphthalenylthio)- (9CI) (CA INDEX NAME)



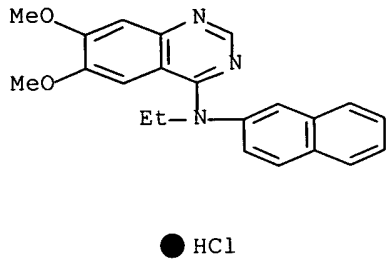
RN 167410-78-8 CAPLUS
CN Quinazoline, 6,7-dimethoxy-4-(1-naphthalenyloxy)- (9CI) (CA INDEX NAME)



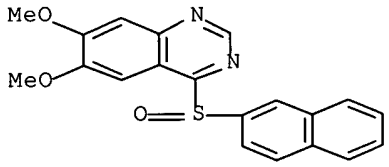
RN 167410-79-9 CAPLUS
CN Quinazoline, 6,7-dimethoxy-4-(2-naphthalenyloxy)- (9CI) (CA INDEX NAME)



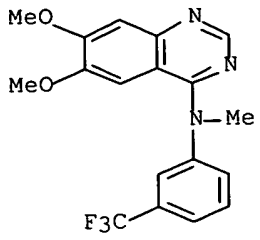
RN 167410-80-2 CAPLUS
CN 4-Quinazolinamine, N-ethyl-6,7-dimethoxy-N-2-naphthalenyl-, monohydrochloride (9CI) (CA INDEX NAME)



RN 167410-81-3 CAPLUS
CN Quinazoline, 6,7-dimethoxy-4-(2-naphthalenylsulfinyl)- (9CI) (CA INDEX NAME)

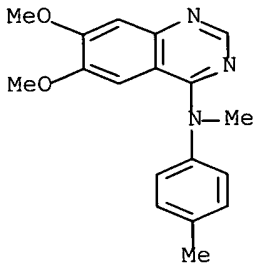


RN 174892-22-9 CAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-methyl-N-[3-(trifluoromethyl)phenyl]-,
monohydrochloride (9CI) (CA INDEX NAME)



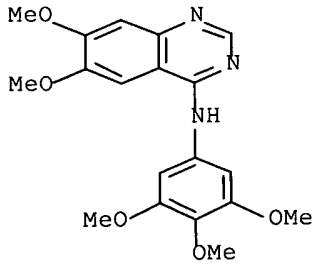
● HCl

RN 174892-24-1 CAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-methyl-N-(4-methylphenyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 202475-54-5 CAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-(3,4,5-trimethoxyphenyl)- (9CI) (CA INDEX NAME)



L16 ANSWER 11 OF 13 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1997:414195 CAPLUS
DOCUMENT NUMBER: 127:34137
TITLE: Preparation of quinoline and quinazoline derivatives inhibiting platelet-derived growth factor receptor autophosphorylation

INVENTOR(S): Kubo, Kazuo; Ohyama, Shinichi; Shimizu, Toshiyuki; Nishitoba, Tsuyoshi; Kato, Shinichiro; Murooka, Hideko; Kobayashi, Yoshiko; et al.

PATENT ASSIGNEE(S): Kirin Beer Kabushiki Kaisha, Japan; Kubo, Kazuo; Ohyama, Shinichi; Shimizu, Toshiyuki; Nishitoba, Tsuyoshi; Kato, Shinichiro

SOURCE: PCT Int. Appl., 243 pp.
CODEN: PIXXD2

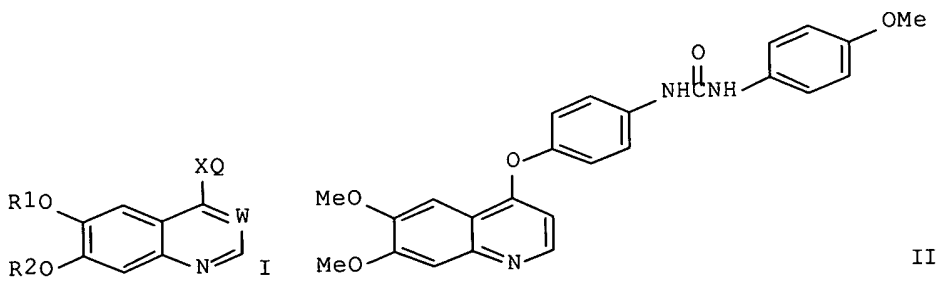
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9717329	A1	19970515	WO 1996-JP3229	19961105
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9673400	A1	19970529	AU 1996-73400	19961105
EP 860433	A1	19980826	EP 1996-935541	19961105
R: CH, DE, FR, GB, LI				
US 6143764	A	20001107	US 1998-68660	19980506

PRIORITY APPLN. INFO.:
JP 1995-313555 A 19951107
JP 1996-62121 A 19960223
WO 1996-JP3229 W 19961105

OTHER SOURCE(S): MARPAT 127:34137

GI



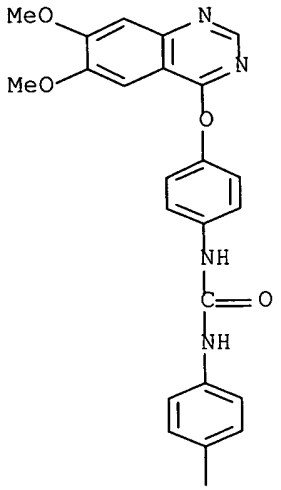
AB The title compds. I [R1 and R2 represent each H or C1-4 alkyl, or R1 and R2 together form C1 to C3 alkylene; X represents O, S or CH2; W represents CH or N; and Q represents substituted aryl or substituted heteroaryl] are prepd. I inhibit platelet-derived growth factor receptor autophosphorylation and are useful in the treatment of cancer,

arthritis,
etc. The title compd. II (prepn. given) (at 100 mg/kg i.p. once daily for
9 days) increased the survival of mice with transplanted leukemic P388 cells by 130%.

IT **190727-97-0P 190727-98-1P 190727-99-2P**
190728-00-8P 190728-01-9P
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic
preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of quinoline and quinazoline derivs. inhibiting platelet-derived growth factor receptor autophosphorylation)

RN 190727-97-0 CAPLUS
CN Urea, N-[4-[(6,7-dimethoxy-4-quinazolinyl)oxy]phenyl]-N'-(4-methoxyphenyl)-
(9CI) (CA INDEX NAME)

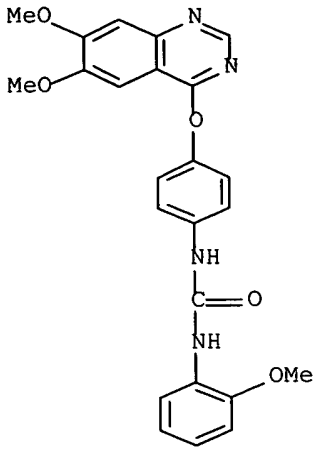
PAGE 1-A



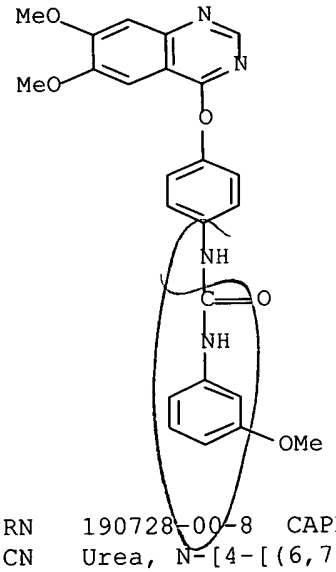
PAGE 2-A

OMe

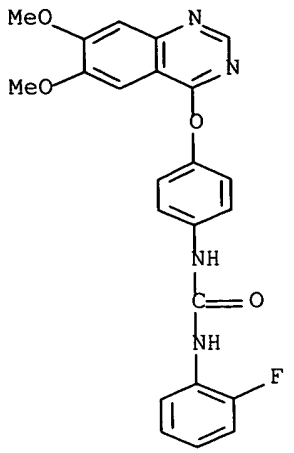
RN 190727-98-1 CAPLUS
CN Urea, N-[4-[(6,7-dimethoxy-4-quinazolinyl)oxy]phenyl]-N'-(2-methoxyphenyl)-
(9CI) (CA INDEX NAME)



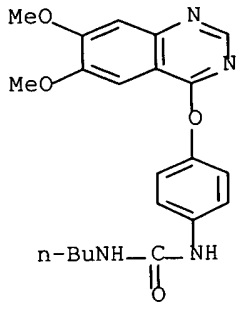
RN 190727-99-2 CAPLUS
CN Urea, N-[4-[(6,7-dimethoxy-4-quinazolinyl)oxy]phenyl]-N'-(3-methoxyphenyl)-
(9CI) (CA INDEX NAME)



RN 190728-00-8 CAPLUS
CN Urea, N-[4-[(6,7-dimethoxy-4-quinazolinyl)oxy]phenyl]-N'-(2-fluorophenyl)-
(9CI) (CA INDEX NAME)



RN 190728-01-9 CAPLUS
CN Urea, N-butyl-N'-[4-[(6,7-dimethoxy-4-quinazolinyl)oxy]phenyl]- (9CI) (CA
INDEX NAME)



L16 ANSWER 12 OF 13 CAPLUS COPYRIGHT 2002 ACS

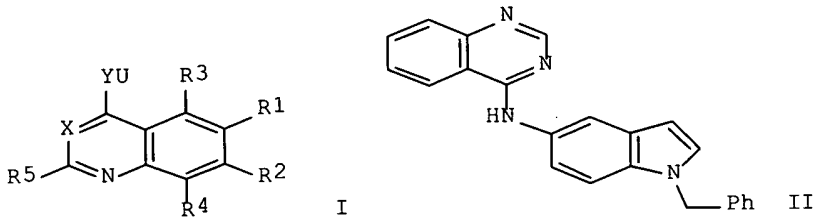
ACCESSION NUMBER:	1997:204146 CAPLUS
DOCUMENT NUMBER:	126:199580
TITLE:	Preparation of heterocyclyl-substituted quinazolines as protein tyrosine kinase inhibitors
INVENTOR(S):	Cockerill, George Stuart; Carter, Malcolm Clive; Mckeown, Stephen Karl; Vile, Sadie; Page, Martin John; Hudson, Alan Thomas; Barraclough, Paul; Franzmann, Karl Witold
PATENT ASSIGNEE(S):	Glaxo Group Limited, UK; Cockerill, George Stuart; Carter, Malcolm Clive; Mckeown, Stephen Karl; Vile, Sadie; Page, Martin John; Hudson, Alan Thomas; Barraclough, Paul; Franzmann, Karl Witold
SOURCE:	PCT Int. Appl., 47 pp. CODEN: PIXXD2
DOCUMENT TYPE:	Patent
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9703069	A1	19970130	WO 1996-EP3026	19960711
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA				
AU 9666139	A1	19970210	AU 1996-66139	19960711
EP 843671	A1	19980527	EP 1996-925710	19960711
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 11508906	T2	19990803	JP 1996-505503	19960711
PRIORITY APPLN. INFO.:			GB 1995-14265	19950713
			WO 1996-EP3026	19960711

OTHER SOURCE(S): MARPAT 126:199580

GI

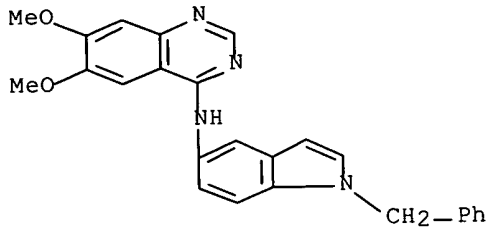


AB The title compds. [I; X = N, CH; Y = OCH2, CH2O, NH, etc.; U = (un)substituted 5-10-membered mono or bicyclic ring system contg. one or more heteroatoms such as N, O, S; R1-R4 = H, halo, NH2, etc.; R5 = H, halo, CF3, etc.], which are protein tyrosine kinase inhibitors, and useful in the treatment of psoriasis, fibrosis, atherosclerosis, restenosis, auto-immune disease, allergy, asthma, transplantation rejection, **inflammation**, thrombosis, nervous system diseases, and cancer, were prepd. Thus, reaction of 4-chloroquinazoline with 5-amino-1-benzylindole in iPrOH afforded II.HCl which showed IC50 of 0.26 .mu.M against the c-erbB-2 kinase.

IT **187667-04-5P 187667-07-8P 187667-18-1P**
187667-28-3P 187667-31-8P 187667-34-1P
187667-37-4P 187667-40-9P 187667-43-2P
187667-58-9P 187667-61-4P 187667-67-0P
187667-72-7P 187667-77-2P 187667-79-4P
187667-86-3P 187667-89-6P 187667-92-1P
187667-95-4P 187667-98-7P
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP

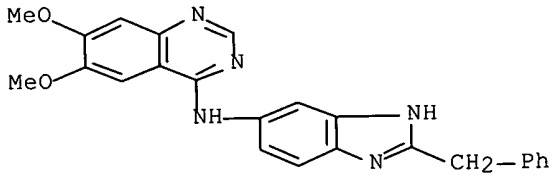
(Preparation); USES (Uses)
(prepn. of heterocyclyl-substituted quinazolines as protein tyrosine kinase inhibitors)

RN 187667-04-5 CAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-[1-(phenylmethyl)-1H-indol-5-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



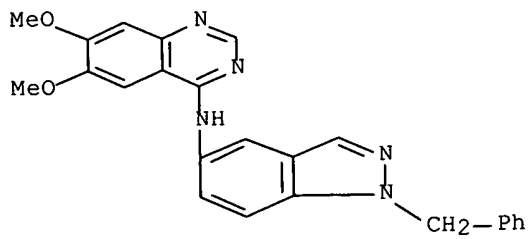
● HCl

RN 187667-07-8 CAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-[2-(phenylmethyl)-1H-benzimidazol-5-yl]-
, monohydrochloride (9CI) (CA INDEX NAME)



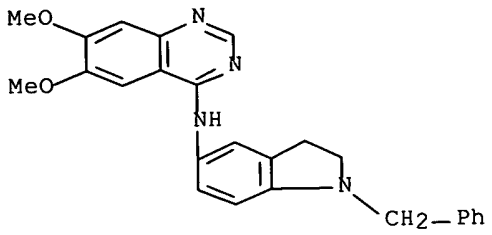
● HCl

RN 187667-18-1 CAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-[1-(phenylmethyl)-1H-indazol-5-yl]-(9CI) (CA INDEX NAME)



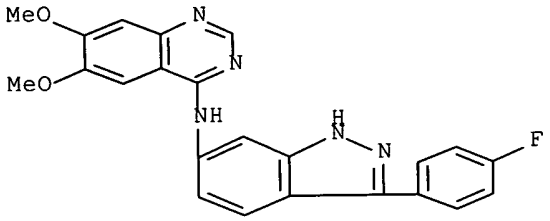
RN 187667-28-3 CAPLUS
CN 4-Quinazolinamine, N-[2,3-dihydro-1-(phenylmethyl)-1H-indol-5-yl]-6,7-

dimethoxy-, monohydrochloride (9CI) (CA INDEX NAME)



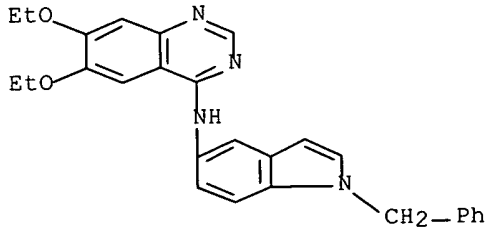
● HCl

RN 187667-31-8 CAPLUS
CN 4-Quinazolinamine, N-[3-(4-fluorophenyl)-1H-indazol-6-yl]-6,7-dimethoxy-
,
monohydrochloride (9CI) (CA INDEX NAME)



● HCl

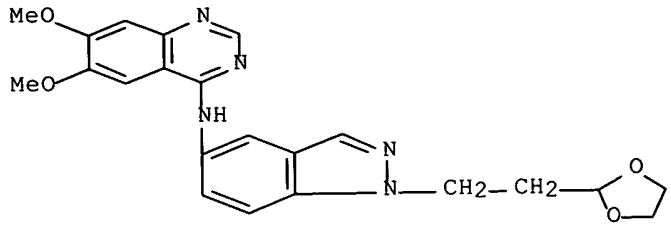
RN 187667-34-1 CAPLUS
CN 4-Quinazolinamine, 6,7-diethoxy-N-[1-(phenylmethyl)-1H-indol-5-yl]-,
monohydrochloride (9CI) (CA INDEX NAME)



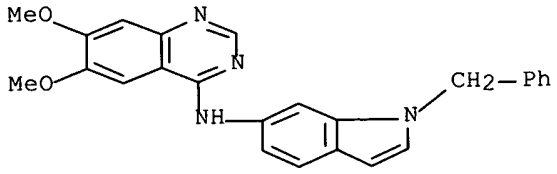
● HCl

RN 187667-37-4 CAPLUS
CN 4-Quinazolinamine, N-[1-[2-(1,3-dioxolan-2-yl)ethyl]-1H-indazol-5-yl]-
6,7-

dimethoxy- (9CI) (CA INDEX NAME)

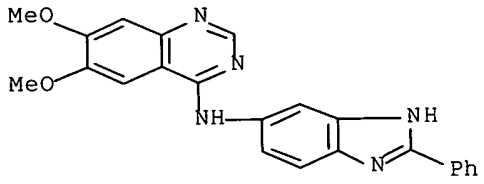


RN 187667-40-9 CAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-[1-(phenylmethyl)-1H-indol-6-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



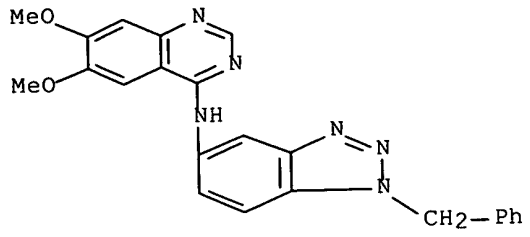
● HCl

RN 187667-43-2 CAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-(2-phenyl-1H-benzimidazol-5-yl)-, monohydrochloride (9CI) (CA INDEX NAME)

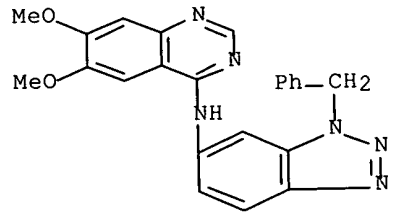


● HCl

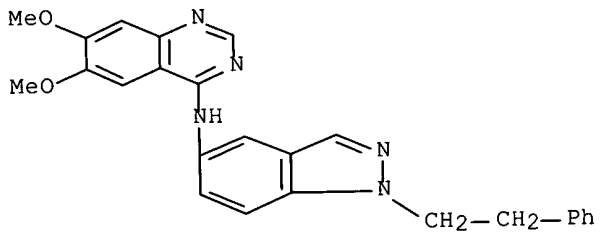
RN 187667-58-9 CAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-[1-(phenylmethyl)-1H-benzotriazol-5-yl]-
(9CI) (CA INDEX NAME)



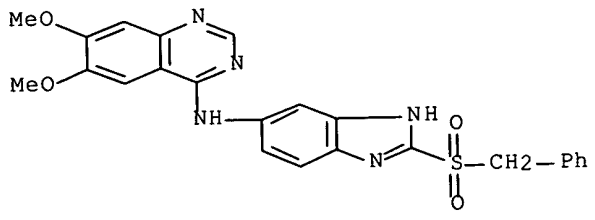
RN 187667-61-4 CAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-[1-(phenylmethyl)-1H-benzotriazol-6-yl]-
(9CI) (CA INDEX NAME)



RN 187667-67-0 CAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-[1-(2-phenylethyl)-1H-indazol-5-yl]-
(9CI) (CA INDEX NAME)

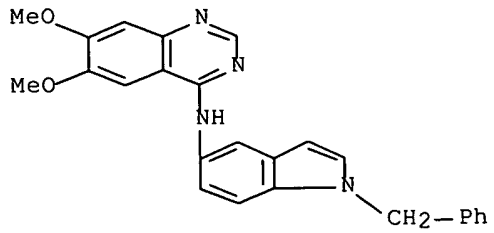


RN 187667-72-7 CAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-[2-[(phenylmethyl)sulfonyl]-1H-benzimidazol-5-yl]- (9CI) (CA INDEX NAME)

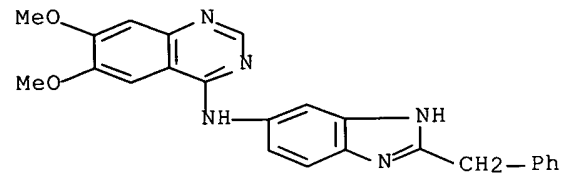


RN 187667-77-2 CAPLUS

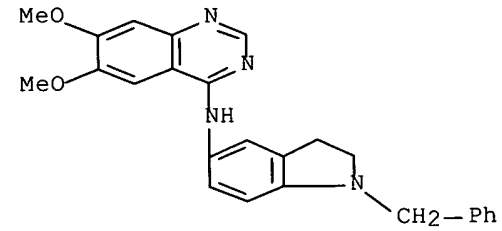
CN 4-Quinazolinamine, 6,7-dimethoxy-N-[1-(phenylmethyl)-1H-indol-5-yl]-
(9CI)
(CA INDEX NAME)



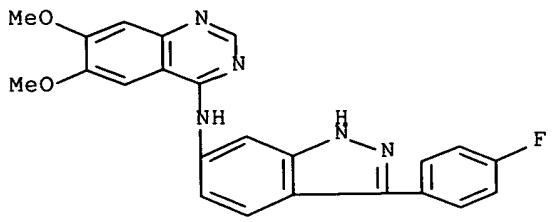
RN 187667-79-4 CAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-[2-(phenylmethyl)-1H-benzimidazol-5-
yl]-
(9CI) (CA INDEX NAME)



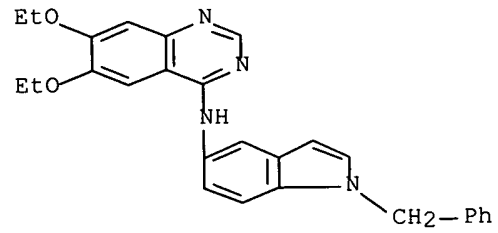
RN 187667-86-3 CAPLUS
CN 4-Quinazolinamine, N-[2,3-dihydro-1-(phenylmethyl)-1H-indol-5-yl]-6,7-
dimethoxy- (9CI) (CA INDEX NAME)



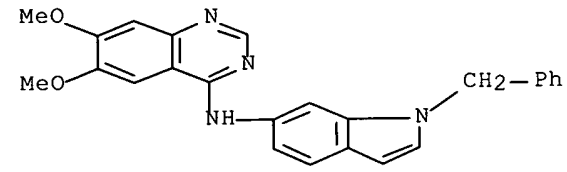
RN 187667-89-6 CAPLUS
CN 4-Quinazolinamine, N-[3-(4-fluorophenyl)-1H-indazol-6-yl]-6,7-dimethoxy-
(9CI) (CA INDEX NAME)



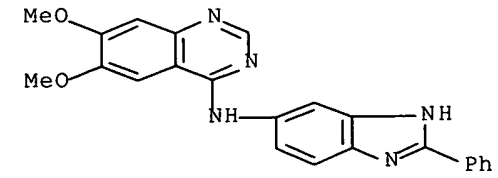
RN 187667-92-1 CAPLUS
CN 4-Quinazolinamine, 6,7-diethoxy-N-[1-(phenylmethyl)-1H-indol-5-yl]-(9CI)
(CA INDEX NAME)



RN 187667-95-4 CAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-[1-(phenylmethyl)-1H-indol-6-yl]-(9CI)
(CA INDEX NAME)



RN 187667-98-7 CAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-(2-phenyl-1H-benzimidazol-5-yl)-(9CI)
(CA INDEX NAME)



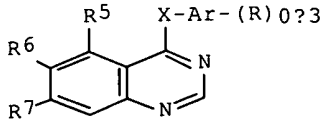
L16 ANSWER 13 OF 13 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1995:780431 CAPLUS
DOCUMENT NUMBER: 123:160872
TITLE: Aryl and heteroaryl quinazoline compounds which inhibit CSF-1R receptor tyrosine kinase
INVENTOR(S): Myers, Michael R.; Spada, Alfred P.; Maguire, Martin P.; Persons, Paul E.; Zilberstein, Asher; Hsu, Chin-Yi
Jenny; Johnson, Susan E.
PATENT ASSIGNEE(S): Rhone-Poulenc Rorer Pharmaceuticals Inc., USA
SOURCE: PCT Int. Appl., 38 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 7
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9515758	A1	19950615	WO 1994-US14180	19941208
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US, UZ, VN				
RW: KE, MW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5480883	A	19960102	US 1993-166199	19931210
US 5710158	A	19980120	US 1994-229886	19940419
AU 9513050	A1	19950627	AU 1995-13050	19941208
EP 871448	A1	19981021	EP 1995-904308	19941208
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE				
US 5656643	A	19970812	US 1995-385258	19950208
US 5714493	A	19980203	US 1996-652444	19960604

PRIORITY APPLN. INFO.:
US 1993-166199 19931210
US 1994-229886 19940419
US 1991-698420 19910510
US 1992-988515 19921210
US 1993-146072 19931108
WO 1994-US14180 19941208

OTHER SOURCE(S): MARPAT 123:160872
GI



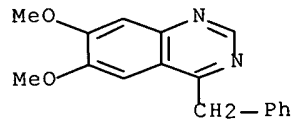
I

AB This invention relates to the modulation and/or inhibition of cell signaling, cell proliferation, cell **inflammatory** response, the control of abnormal cell growth and cell reprodn. More specifically, this

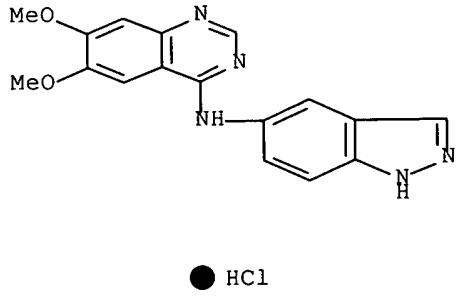
invention relates to the use of mono- and/or bicyclic aryl or heteroaryl quinazoline compds. (I; Ar = aryl or heteroaryl; X = O, S, SO, SO2, OCH2, NH, NR4, etc.; R = H, alkyl, aryl, alkenyl, OH, alkoxy, aralkoxy, aryloxy, halo, nitro, cyano, amino, amido, sulfonyl, halophenyl, benzoyl, etc.) in inhibiting cell proliferation, including compds. which are useful protein tyrosine kinase (PTK) inhibitors. The method of treating cell proliferation and/or differentiation or mediator release using said quinazoline compds. and their use in pharmaceutical compns. is described.

IT **37514-62-8 159737-62-9 167410-34-6**
167410-48-2 167410-51-7 167410-52-8
167410-54-0 167410-55-1 167410-58-4
167410-59-5 167410-61-9 167410-65-3
167410-66-4 167410-67-5 167410-68-6
167410-69-7 167410-71-1 167410-72-2
167410-73-3 167410-74-4 167410-75-5
167410-76-6 167410-77-7 167410-78-8
167410-79-9 167410-80-2 167410-81-3
167410-82-4
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(quinazoline compds. as inhibitors of CSF-1 receptors)

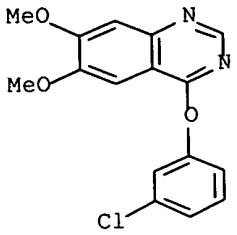
RN 37514-62-8 CAPLUS
CN Quinazoline, 6,7-dimethoxy-4-(phenylmethyl)- (9CI) (CA INDEX NAME)



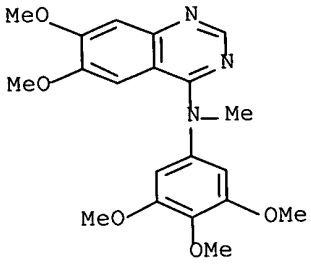
RN 159737-62-9 CAPLUS
CN 4-Quinazolinamine, N-1H-indazol-5-yl-6,7-dimethoxy-, monohydrochloride (9CI) (CA INDEX NAME)



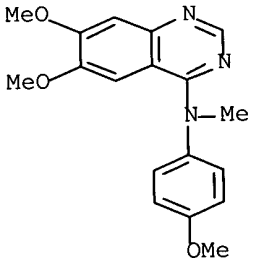
RN 167410-34-6 CAPLUS
CN Quinazoline, 4-(3-chlorophenoxy)-6,7-dimethoxy- (9CI) (CA INDEX NAME)



RN 167410-48-2 CAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-methyl-N-(3,4,5-trimethoxyphenyl)-(9CI) (CA INDEX NAME)

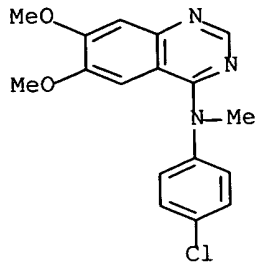


RN 167410-51-7 CAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-(4-methoxyphenyl)-N-methyl-, monohydrochloride (9CI) (CA INDEX NAME)



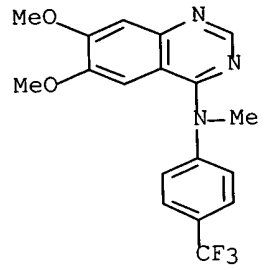
● HCl

RN 167410-52-8 CAPLUS
CN 4-Quinazolinamine, N-(4-chlorophenyl)-6,7-dimethoxy-N-methyl-, monohydrochloride (9CI) (CA INDEX NAME)



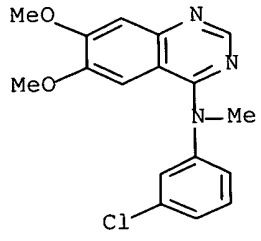
● HCl

RN 167410-54-0 CAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-methyl-N-[4-(trifluoromethyl)phenyl]-
,
monohydrochloride (9CI) (CA INDEX NAME)



● HCl

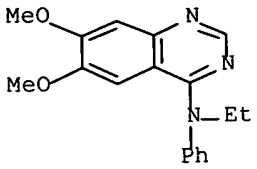
RN 167410-55-1 CAPLUS
CN 4-Quinazolinamine, N-(3-chlorophenyl)-6,7-dimethoxy-N-methyl-,
monohydrochloride (9CI) (CA INDEX NAME)



● HCl

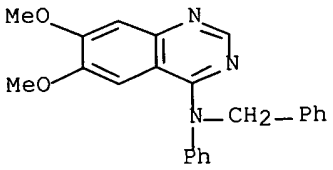
RN 167410-58-4 CAPLUS
CN 4-Quinazolinamine, N-ethyl-6,7-dimethoxy-N-phenyl-, monohydrochloride

(9CI) (CA INDEX NAME)



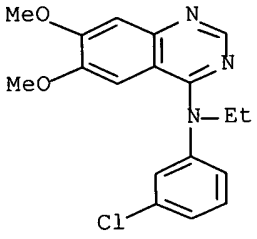
● HCl

RN 167410-59-5 CAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-phenyl-N-(phenylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)



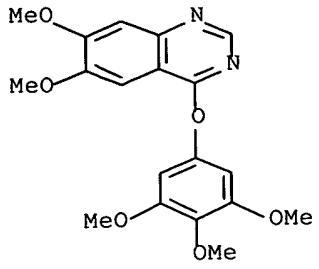
● HCl

RN 167410-61-9 CAPLUS
CN 4-Quinazolinamine, N-(3-chlorophenyl)-N-ethyl-6,7-dimethoxy-, monohydrochloride (9CI) (CA INDEX NAME)

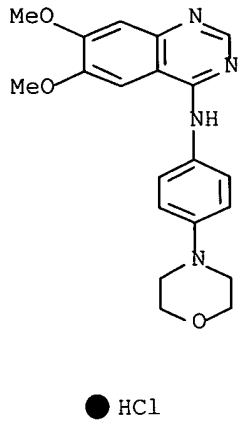


● HCl

RN 167410-65-3 CAPLUS
CN Quinazoline, 6,7-dimethoxy-4-(3,4,5-trimethoxyphenoxy)- (9CI) (CA INDEX NAME)

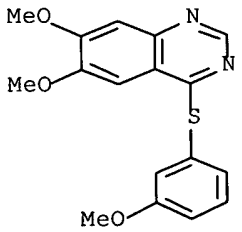


RN 167410-66-4 CAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-[4-(4-morpholinyl)phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)

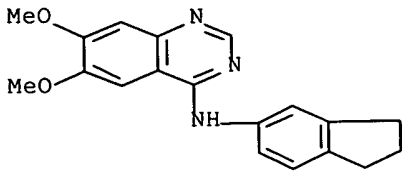


● HCl

RN 167410-67-5 CAPLUS
CN Quinazoline, 6,7-dimethoxy-4-[(3-methoxyphenyl)thio]- (9CI) (CA INDEX NAME)

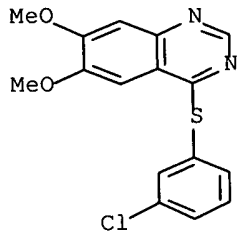


RN 167410-68-6 CAPLUS
CN 4-Quinazolinamine, N-(2,3-dihydro-1H-inden-5-yl)-6,7-dimethoxy-, monohydrochloride (9CI) (CA INDEX NAME)

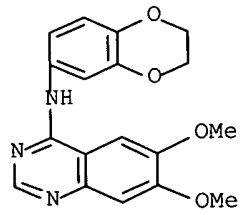


● HCl

RN 167410-69-7 CAPLUS
CN Quinazoline, 4-[(3-chlorophenyl)thio]-6,7-dimethoxy- (9CI) (CA INDEX NAME)

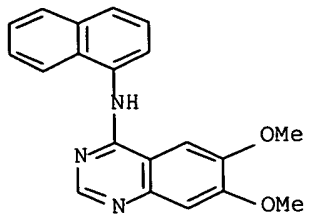


RN 167410-71-1 CAPLUS
CN 4-Quinazolinamine, N-(2,3-dihydro-1,4-benzodioxin-6-yl)-6,7-dimethoxy-, monohydrochloride (9CI) (CA INDEX NAME)



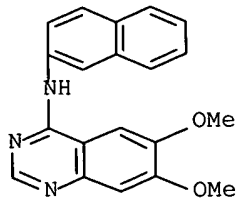
● HCl

RN 167410-72-2 CAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-1-naphthalenyl-, monohydrochloride (9CI) (CA INDEX NAME)



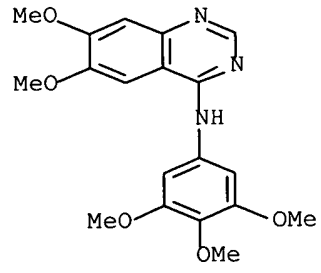
● HCl

RN 167410-73-3 CAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-2-naphthalenyl-, monohydrochloride (9CI) (CA INDEX NAME)



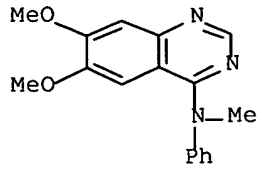
● HCl

RN 167410-74-4 CAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-(3,4,5-trimethoxyphenyl)-, monohydrochloride (9CI) (CA INDEX NAME)



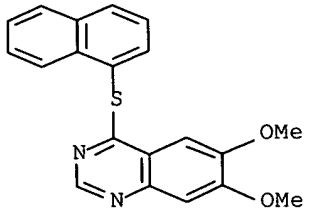
● HCl

RN 167410-75-5 CAPLUS
CN 4-Quinazolinamine, 6,7-dimethoxy-N-methyl-N-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)

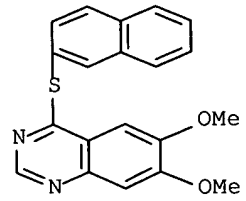


● HCl

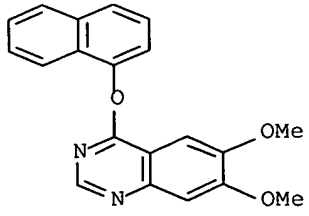
RN 167410-76-6 CAPLUS
CN Quinazoline, 6,7-dimethoxy-4-(1-naphthalenylthio)- (9CI) (CA INDEX NAME)



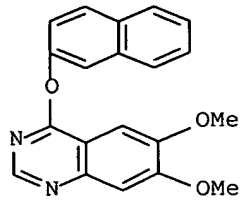
RN 167410-77-7 CAPLUS
CN Quinazoline, 6,7-dimethoxy-4-(2-naphthalenylthio)- (9CI) (CA INDEX NAME)



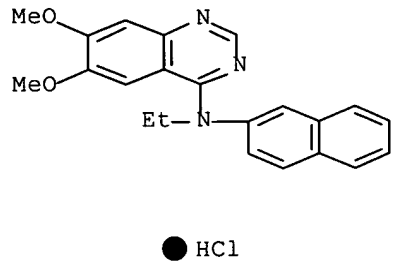
RN 167410-78-8 CAPLUS
CN Quinazoline, 6,7-dimethoxy-4-(1-naphthalenyloxy)- (9CI) (CA INDEX NAME)



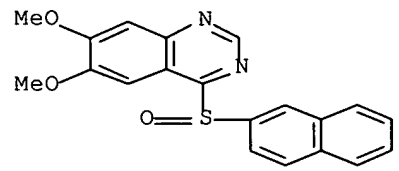
RN 167410-79-9 CAPLUS
CN Quinazoline, 6,7-dimethoxy-4-(2-naphthalenyloxy)- (9CI) (CA INDEX NAME)



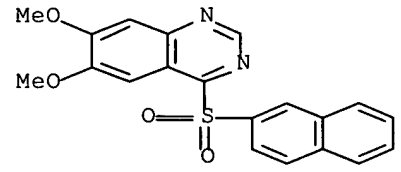
RN 167410-80-2 CAPLUS
CN 4-Quinazolinamine, N-ethyl-6,7-dimethoxy-N-2-naphthalenyl-, monohydrochloride (9CI) (CA INDEX NAME)



RN 167410-81-3 CAPLUS
CN Quinazoline, 6,7-dimethoxy-4-(2-naphthalenylsulfinyl)- (9CI) (CA INDEX NAME)



RN 167410-82-4 CAPLUS
CN Quinazoline, 6,7-dimethoxy-4-(2-naphthalenylsulfonyl)- (9CI) (CA INDEX NAME)



=> e prostaglandin/ct
E# FREQUENCY AT TERM

```
--    ---------     --      ----
E1            0      2      PROSTACYCLINS/CT
E2            0      2      PROSTACYCLINS PROSTAGLANDINS/CT
E3            0      1 --> PROSTAGLANDIN/CT
E4            0      6      PROSTAGLANDIN A1/CT
E5            0      6      PROSTAGLANDIN A2/CT
E6            0      2      PROSTAGLANDIN ANTAGONISTS/CT
E7            1      2      PROSTAGLANDIN B/CT
E8            0      2      PROSTAGLANDIN CYCLOOXYGENASE-INHIBITING MOL.
STRUCTURE
                            -BIOL. ACTIVITY RELATIONSHIP/CT
E9            0      2      PROSTAGLANDIN D RECEPTORS/CT
E10           0     15      PROSTAGLANDIN D2/CT
E11           0      2      PROSTAGLANDIN DP RECEPTORS/CT
E12          40      2      PROSTAGLANDIN E/CT

=> d his

     (FILE 'HOME' ENTERED AT 14:49:01 ON 23 JAN 2002)

     FILE 'REGISTRY' ENTERED AT 14:49:11 ON 23 JAN 2002
L1                STRUCTURE UPLOADED
L2                QUE L1
L3           4195 S L1 FUL

     FILE 'CAPLUS' ENTERED AT 14:50:09 ON 23 JAN 2002
L4        1191046 S L
L5            269 S L3
                  E UVB RADIATION
                  E UVB RADIATION/CT
                  E UVB
                  E E3+ALL
                  E UVB/CT
                  E ULTRAVIOLET B RADIATION/CT
                  E UVB LIGHT/CT
                  E INFLAMMATION
                  E E3+ALL
                  E INFLAMMATION/CT
                  E E3+ALL
L6          132520 S INFLAMMAT?
L7           15243 S EMPYEMA OR LAMINITIS OR CYCLOOXYGENASE
L8          143431 S L6 OR L7
                  E PROSTALGLANDIN E2
                  E PROSTALGLANDIN E2/CT
                  E PROSTALGLANDIN/CT
                  E PROSTAGLANDIN/CT
                  E E12+ALL
L9           5238 S PROSTAGLANDIN E OR PROSTAGLANDINS (L) E
                  E ULTRAVIOLET LIGHT
                  E ULTRAVIOLET LIGHT/CT
                  E E12+AA
                  E E12+ALL
                  E ULTRAVIOLET RADIATION/CT
                  E E3+ALL
                  E ULTRAVIOLET RADIATION B/CT
                  E UV RADIATION B/CT
L10         43935 S ULTRAVIOLET RADIATION OR UV RADIATION
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L11          11 S L5 AND L8
L12           2 S L5 AND L10
L13          11 S L5 AND L8
L14           0 S L5 AND L9
L15           0 S L11 AND L12
L16          13 S L11 OR L12
                E PROSTAGLANDIN/CT

=> logoff
ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF
LOGOFF? (Y)/N/HOLD:y
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                          ENTRY     SESSION
FULL ESTIMATED COST                                       88.97      229.66

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)              SINCE FILE      TOTAL
                                                          ENTRY     SESSION
CA SUBSCRIBER PRICE                                       -8.05       -8.05

STN INTERNATIONAL LOGOFF AT 15:09:38 ON 23 JAN 2002
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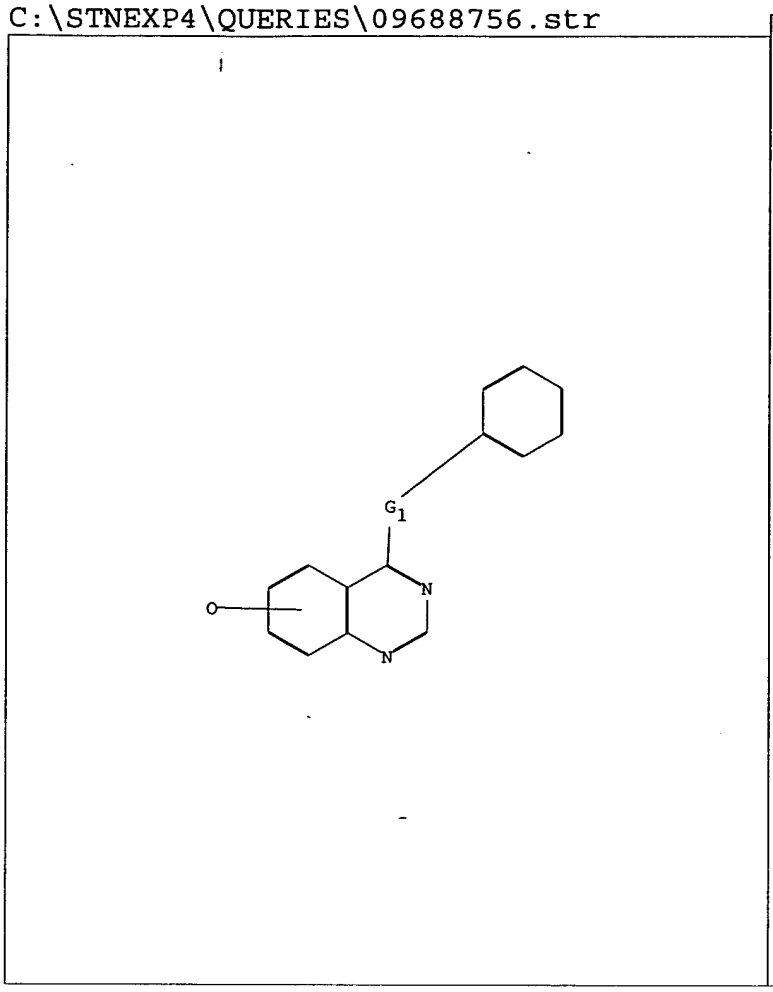
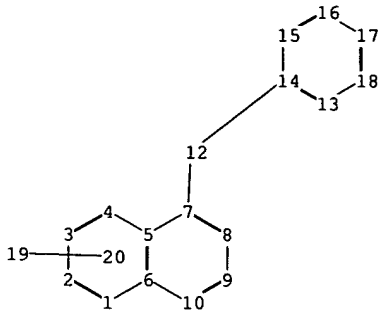
C:\STNEXP4\QUERIES\09688756.str





chain nodes :
12 19
ring nodes :
1 2 3 4 5 6 7 8 9 10 13 14 15 16 17 18
chain bonds :
7-12 12-14
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 13-14 13-18
14-15 15-16 16-17 17-18
exact/norm bonds :
7-12 12-14
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 13-14 13-18
14-15 15-16 16-17 17-18

G1:C,O,S,N

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom
10:Atom 12:CLASS 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom
19:CLASS 20:CLASS